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CONSTRUCTION COMPLETION REPORT, VARIOUS SITE REMEDIATIONS

FORT DEARBORN U.S. ARMY RESERVE CENTER
Chicago, Illinois

DRAFT

RECEIVED
MAY 01 2003
SUPERFUND DIVISION

Prepared for:

US Army Corps of Engineers
Louisville District

Prepared by:

MWH

April 2003

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FORT DEARBORN U.S. ARMY RESERVE CENTER CHICAGO, ILLINOIS

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By

April 29, 2003

DEPARTMENT OF THE ARMY
ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT
600 ARMY PENTAGON
WASHINGTON, DC 20310-0600

REPLY TO
ATTENTION OF

Army Reserve Division

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MAY 01 2003
SUPERFUND DIVISION

APR 30 2003

Ms. Karen Mason-Smith
USEPA, Region V
ATTN: SRF-5J
77 West Jackson Boulevard
Chicago, IL 60604-3590

Dear Ms. Mason-Smith:

This correspondence provides the Draft Data Validation Report and Draft Construction Completion Report, for Various Site Remediations for the Fort Dearborn U.S. Army Reserve Center. Copies have also been distributed to the Illinois Environmental Protection Agency Federal Facilities Unit office.

Comments on the provided reports may be directed this office. Please feel free to call Douglas Meadors of the US Army Engineer District Louisville at (502) 315-6345 with any technical questions regarding the enclosed documents.

You may direct your comments to MAJ David Quivey, Project Officer, by e-mail at david.quivey@ocar.army.pentagon.mil, by mail to the address provided in this correspondence or by telephone at (703) 601-3406.

Sincerely,

Del C. Fougner
Colonel, US Army
Director, Army Reserve Division

Enclosure

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DEPARTMENT OF THE ARMY
ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT
600 ARMY PENTAGON
WASHINGTON, DC 20310-0600

REPLY TO
ATTENTION OF

Army Reserve Division

RECEIVED
MAY 01 2003
SUPERFUND DIVISION

Mr. Andrew Jankowski, Project Manager
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276

Dear Mr. Jankowski:

This correspondence provides the Draft Data Validation Report and Draft Construction Completion Report, for Various Site Remediations for the Fort Dearborn U.S. Army Reserve Center. Copies have also been distributed to the United States Environmental Protection Agency Region V, Federal Facilities Response Section office.

Comments on the provided reports may be directed this office. Please feel free to call Douglas Meadors of the US Army Engineer District Louisville at (502) 315-6345 with any technical questions regarding the enclosed documents.

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ACRONYMS AND ABBREVIATIONS

ARDL	Applied Research & Development Laboratory
ARS	O'Hare Air Reserve Station
AST	Above Ground Storage Tank
bgs	below ground surface
BCT	Base Closure Team
BRAC	Base Realignment and Closure Act
CCR	Construction Completion Report
DOT	Department of Transportation
EBS	Environmental Baseline Survey
Harza	Harza Engineering Company
IAC	Illinois Administrative Code
IEPA	Illinois Environmental Protection Agency
mg/kg	milligrams per kilogram
MDEQ	Michigan Department of Environmental Quality
MWH	MWH Americas, Inc.
NPDES	National Pollutant Discharge Elimination System
OMS	Organizational Maintenance Shop
OTH-1	Former Vehicle Inspection Pit
OTH-2	Former Shop Sink
OTH-3	Former Vehicle Wash Rack
OWS-1	Oil-Water Separator
PAH	Polynuclear Aromatic Hydrocarbon
PCB	Polychlorinated Biphenyl
PID	Photoionization Detector
POV	Personal Owned Vehicle
QC	Quality Control
PRG	Preliminary Remediation Goal
SVOC	Semi-Volatile Organic Compound
TACO	Tiered Approach to Corrective Action Objectives
TAL	Target Analyte List
TCLP	Toxicity Characteristics Leaching Procedure
µg/kg	micrograms per kilogram
USACE	U.S. Army Corps of Engineers
USAR	U.S. Army Reserve
USARC	U.S. Army Reserve Center
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound

1.0 INTRODUCTION

(4 sites)

This Construction Completion Report (CCR) summarizes demolition activities completed at the Former Vehicle Inspection Pit (OTH-1), Former Shop Sink (OTH-2), Former Vehicle Wash Rack (OTH-3), and Oil-Water Separator (OWS-1) sites at the Fort Dearborn U.S. Army Reserve Center (USARC), 6540 N. Mannheim Road, Chicago, Illinois. The demolition activities were completed between 10 September 2002 and 18 September 2002 by Ferguson-Harbour, Inc. (Ferguson-Harbour), Groveport, Ohio under Contract No. DACA27-97-D-007, Delivery Order No. 0016. The U.S. Army Corps of Engineers, Louisville District (USACE) contracted MWH Americas, Inc (MWH) to prepare this CCR under Contract No. DACW45-94-D-0044, Delivery Order No. 0026.

This CCR was prepared in accordance with the requirements detailed in Section 9.0 of *Final Work Plan for Various Site Remediations, Fort Dearborn USARC, Chicago, Illinois* (Ferguson-Harbour, 2001a) as approved by the Illinois Environmental Protection Agency (IEPA) and United States Environmental Protection Agency – Region V (USEPA).

1.1. BACKGROUND

The Fort Dearborn USARC is an inactive facility that occupied 16.48 acres at the northeast corner of O'Hare International Airport, City of Chicago, Cook County, Illinois (Figure 1). The USARC property is bound on the east by Mannheim Road, on the north by Higgins Road, on the west by the former U.S. Air Force O'Hare Air Reserve Station (ARS), and on the south by the former O'Hare ARS and Bessie Coleman Drive. Two buildings are located on the USARC property, a Reserve Center Building and the Organizational Maintenance Shop (OMS). The Reserve Center Building was constructed for use as an administration office and drill hall. It is a multiple level irregular shaped building consisting of one, one and one-half, and two story rectangular building sections. The OMS Building was constructed for use as a vehicle maintenance facility. It is a one story rectangular building with concrete block walls and a brick façade. The parcel of property located between the Reserve Center Building and the OMS Building has historically been used for military and personnel owned vehicle (POV) parking. Remaining portions of the property have remained undeveloped since the time the property was first developed.

Under terms of the Base Realignment and Closure (BRAC) Act of 1995, the Fort Dearborn USARC was to be closed and the land transferred from the U.S. Army Reserve (USAR) to the

City of Chicago. In 1999, the USACE retained Harza Engineering Company (Harza), Chicago, Illinois to complete a Phase I Environmental Baseline Survey (EBS) for the USARC property. The purpose of the Phase I EBS was to document the environmental condition of the property, resulting from the storage, release, and disposal of hazardous substances and petroleum products, and their derivatives, over the installation's history. In part, results of the Phase I EBS (Harza, 2000) identified five (5) sites requiring further investigation to resolve data gaps. These sites were placed in Category 7 because available information was insufficient to make determination of the environmental condition at these sites. A Category 7 property is defined as a geographically continuous and mapable area where the presence of sources or releases of hazardous substances or petroleum products (including derivatives) is suspected, but not well characterized, based on the results of a properly scoped records search, chain of title review, aerial photograph review, physical inspection, set of employee interviews and possibly sampling and analysis. To date, the portion of the USARC property located south of the Reserve Center Building has been transferred by deed to the City of Chicago. Transfer by lease or deed of the remaining portion of the USARC property containing the Category 7 sites is pending.

This CCR addresses the removal of equipment and collection of associated soil samples for laboratory chemical analysis at four of the five identified Category 7 locations [i.e., Former Vehicle Inspection Pit (OTH-1), the Former Shop Sink (OTH-2), the Former Vehicle Wash Rack (OTH-3), and the Oil-Water Separator (OWS-1)] as shown on Figure 2. The goal of the sampling was to obtain sufficient site data to support a determination of suitability for transfer by deed or lease of the Category 7 property and/or identify previously unknown environmental concerns that would require further actions. A fifth Category 7 area, the ~~Indoor Firing Range~~, was remediated by Cape Environmental, Inc. in November 1999 and is not addressed herein.

Comment: ?

? Why not?

1.2. SITE DESCRIPTIONS

1.2.1 Former Vehicle Inspection Pit (OTH-1)

OTH-1 is a former vehicle inspection pit located inside the west side of the OMS Building. Available records indicate that the pit was installed during construction of the OMS Building in 1961 and has been closed (i.e. filled and capped with concrete) since at least 1987. Construction specifications indicate that walls and floor of the pit were constructed of 8-inch thick concrete with stairways at each end to provide physical access. The pit was approximately 27 feet long, including the descending stairways, 2.5 feet wide and 5 feet deep. The pit floor sloped toward a small sump in the center of the floor. No documentary evidence was found during the Phase I EBS (Harza, 2000) that the pit had been inspected to determine its integrity or assess the presence of possible spills prior to being filled.

5th the site ~~not~~ ~~approx~~ include in this CCR?

1.2.2 Former Shop Sink (OTH-2)

OTH-2 is described as an improvised sink installed in 1989 along the west wall inside the OMS Building. The sink reportedly drained to a 55-gallon drum that had holes punched in it and was buried in the ground, west of the OMS Building. During an April 1999 visual site inspection, the sink was found to have been removed; however, a paint silhouette was observed along the west wall inside the OMS Building and an open hole in the exterior of the OMS Building wall was observed near the silhouette.

1.2.3 Former Vehicle Wash Rack (OTH-3)

OTH-3 is a former vehicle wash rack located near the southwest corner of the OMS Building. The wash rack is currently not in use and has reportedly not been used since cancellation of the facility's National Pollutant Discharge Elimination System (NPDES) permit in January 1978. Construction drawings indicate that the wash rack is 15 feet wide, 30 feet long and constructed of 12-inch thick concrete. The wash rack slopes to the south and drains along a riprap protected drainage way toward a shallow ditch near the property boundary. During an April 1999 visual site inspection, the concrete surface of the former wash rack was observed to be in poor condition with numerous cracks and surface spalling.

1.2.4 Oil-Water Separator (OWS-1)

OWS-1 is an approximate 1900-gallon capacity concrete oil-water separator near the northwest corner of the Reserve Center Building. The separator was installed in approximately 1977 and was used to pre-treat wash water from an adjacent wash rack prior to discharge to the municipal storm sewer system. Construction specifications indicate that the separator is 4 feet wide, 8 feet long, and 8 feet deep, with the unit installed at grade level [i.e. the bottom of the separator is approximately 8 feet below ground surface (bgs)]. Results of an interior inspection of OWS-1 in April 1999 indicated that the unit was generally in good condition, except water was noted seeping through the walls near the inlet and outlet pipes on the west and east ends of the unit.

1.3. PROJECT SCOPE AND OBJECTIVES

Field work completed for this project consisted of removing facilities and/or collecting soil samples for laboratory chemical analysis associated with the Former Vehicle Inspection Pit (OTH-1), the Former Shop Sink (OTH-2), the Former Vehicle Wash Rack (OTH-3), and the Oil-Water Separator (OWS-1) sites. Site-specific scope and objectives were as follows:

- Sample soils at the Former Vehicle Inspection Pit (OTH-1) for identification of possible contamination.

- Perform an investigative excavation to determine if a buried drum is located at the Former Shop Sink (OTH-2) site, remove the drum (if present), and sample surrounding soils to identify possible contamination.

- Remove the Former Vehicle Wash Rack (OTH-3) and sample surrounding soils to identify possible contamination.

- Remove the Oil-Water Separator (OWS-1) and sample surrounding soils to identify possible contamination.

- Remove any visually obvious contaminated soil found during equipment removal and restore each area to near original condition.

Principal work activities completed to meet these objectives included removal of concrete pavement and sidewalks to facilitate excavation, transporting and disposal of excavated materials, collecting soil samples for laboratory chemical analysis, and backfilling the excavations. Detailed discussion of the field activities performed by Ferguson-Harbour at individual site locations is provided in Section 2.0.

The scope of work also included removal of an empty, unattached 250-gallon aboveground storage tank (AST) that was resting on the ground near the north side of the OMS Building. Upon mobilization, Ferguson-Harbour personnel noted that the tank was not present on the Ft Dearborn USARC property. No further information regarding the disposition of the tank is available.

The USACE separately contracted MWH to prepare this CCR to document the demolition activities and associated sampling results. For purposes of this CCR, sample results are compared to USEPA Region IX Preliminary Remediation Goals (PRGs) for industrial soils (USEPA, 2002) and to Title 35 Illinois Administration Code (IAC) Part 742, Tiered Approach to Corrective Action Objectives (TACO) residential and industrial-commercial criteria.

2.0 DEMOLITION ACTIVITIES

Demolition and associated sampling activities were performed in accordance with the Work Plan (Ferguson-Harbour, 2001a) and Field Sampling Plan (Ferguson-Harbour, 2002a). Principal work activities included: site preparation; excavation; drilling and soil sampling; material loading, transportation and disposal; excavation backfilling; emission and erosion control; site restoration and equipment decontamination; and inspection and oversight. Work completed at each site is described below, organized in accordance with the general type of work activity. Selected representative photographs taken during the fieldwork are provided in Appendix A. Copies of the contractor's field notes are provided in Appendix B.

2.1. SITE PREPARATION

In accordance with O'Hare International Airport requirements and the Illinois Underground Utility Facilities Damage Prevention Act (220 Illinois Compiled Statutes 50), an underground utilities search was conducted at each site prior to excavation. Utility lines were field marked by the owner of each utility and available utility maps for the USARC property were provided to Ferguson-Harbour field personnel for additional reference during implementation of the demolition activities.

An initial site health and safety meeting was held with site personnel to discuss the planned field operations and associated safety issues. A site walkthrough was conducted to familiarize site workers with the work areas. The field crews deployed and staged the necessary equipment to perform the planned field activities. Principal equipment used included a trackhoe excavator, rubber tire loader, core drill, compactor, and roll-off containers.

Other site preparation activities included removal of a portion of the fence near the Oil-Water Separator (OWS-1) site to allow access for excavation activities and coring holes in the concrete floor inside the OMS Building to facilitate drilling of boreholes at the Former Vehicle Inspection Pit (OTH-1).

2.2. EXCAVATION

2.2.1 Former Shop Sink (OTH-2)

The objective of the excavation at OTH-2 was to perform an investigative excavation to determine if a buried drum is located at the site, remove the drum (if present), and sample surrounding soils to identify possible contamination. Excavation at the Former Shop Sink

(OTH-2) began on 11 September 2002 and was completed on 13 September 2002. The initial excavation was completed to a depth of 42-inches below ground surface (bgs) across an area measuring 6 feet by 6 feet immediately adjacent to the northwest corner of the OMS Building. At the depth of 42-inches, a 4-inch diameter, clay sewer pipe was encountered and vertical excavation ceased. The sewer pipe was observed to connect into and receive water from the roof drain at the northwest corner of the OMS Building. The sewer pipe then proceeds westward to an undetermined location. An approximate 2-inch diameter round hole in the downspout and a broken bracket on the exterior wall of the OMS Building were observed during excavation, suggesting that the former shop sink might have connected to the downspout at some time. Excavation then resumed southward along the west wall of the OMS Building in an effort to locate the suspected buried 55-gallon drum. The 55-gallon drum was encountered approximately 3 feet south of the northwest corner of the OMS Building immediately adjacent to the building. The top of the drum was buried approximately 5-inches bgs and was filled with fine sand. The drum and its contents were removed in one piece and placed into a 85-gallon over-pack drum. Visual observation indicated that the drum was intact, with 6 drilled holes in the bottom of the drum and no apparent corrosion.

Following removal of the drum, staining was visually observed in soils immediately beneath the former drum location were detected but no photoionization detector (PID) readings above background were detected. Excavation proceeded to remove the stained soil. At completion, an area of approximately 6 feet long and 4 feet wide depth had been excavated and no PID readings above background were observed. The northern part of the excavation was terminated at a depth of 54-inches and the southern part, in the area of the former buried drum, was excavated to a depth of approximately 7.8 feet bgs. During excavation, water was observed to very slowly enter the floor of the southern part of the excavation. The excavation was left open overnight and was observed to contain approximately 5-inches of water in the bottom of the southern part of the excavation. The final limits of the excavation, as determined using a measured tape and referenced to existing surface features, are illustrated on Figure 3.

Following excavation, confirmation soil samples were collected from the sidewalls and floors of the excavation at the frequency specified in the Michigan Department of Environmental Quality (MDEQ) Waste Management Division Verification of Soil Remediation Guidance Document of April 1994, Revision 1 (MDEQ, 1994), as agreed by the Ft Dearborn USARC Base Closure Team (BCT). Four soil samples were collected from the walls and two from the floor of excavation as shown on Figure 3. The samples were shipped via overnight delivery service to Applied Research & Development Laboratory (ARDL) in Mt. Vernon, IL for analysis. Analytical results are discussed in Section. 3.1.2.

2.2.2 Former Vehicle Wash Rack (OTH-3)

The objective of the excavation at OTH-3 was to remove the former vehicle wash rack and sample surrounding soils to identify possible contamination. Excavation at the Former Vehicle Wash Rack began on 10 September 2002 and was completed on 12 September 2002. Excavation was performed to remove the concrete surface of the wash rack and the underlying baserock. During excavation, no obvious visual or olfactory evidence of contamination was observed and no PID readings above background were detected. At completion, the excavation was completed to a depth of 2-3 feet bgs over an area measuring 14.5 feet wide and 30 feet long. The final limits of the excavation, as determined using a measured tape and referenced to existing surface features, are illustrated on Figure 4.

Following excavation, confirmation soil samples were collected from the sidewalls and floors of the excavation at the frequency specified in MDEQ (1994) guidance. Four soil samples were collected from the walls and four from the floor of excavation as shown on Figure 4. The samples were shipped via overnight delivery service to Applied Research & Development Laboratory (ARDL) in Mt. Vernon, IL for analysis. Analytical results are discussed in Section 3.1.3.

2.2.3 Oil-Water Separator (OWS-1)

The objective of the sampling at OWS-1 was to remove the oil-water separator and sample surrounding soils to identify possible contamination. Excavation to remove the oil-water separator and the existing surrounding backfill materials began and was completed on 17 September 2003. During excavation, no obvious visual or olfactory evidence of contamination was observed and no PID readings above background were detected. However, over-excavation was required to address the dry, unstable soil surrounding the oil-water separator. Excavation was conducted to a depth of 8.5 feet over an area measuring approximately 12 feet by 7 feet. The limits of the excavation, as determined using a measured tape and referenced to existing surface features, are illustrated on Figure 5.

Confirmation samples were collected from the sidewalls and floors of the excavation at the frequency specified in MDEQ (1994) guidance. Four soil samples were collected from the walls and two from the floors of excavation as shown on Figure 5. The samples were then shipped via overnight delivery service to Applied Research & Development Laboratory (ARDL) in Mt. Vernon, IL for analysis. Analytical results are discussed in Section 3.1.3.

2.3. DRILLING AND SOIL SAMPLING

Four soil borings, as shown on Figure 6, were drilled in the area of the Former Vehicle Inspection Pit (OTH-1) to sample soils for identification of possible contamination. Borings were advanced using a hand auger to a depth of 6 feet bgs. During drilling, no base rock/gravel was encountered, which would have prevented sample collection at the planned depth interval. One soil sample was collected for laboratory chemical analysis from a depth of 6 feet bgs from each boring. The samples were shipped via overnight delivery service to Applied Research & Development Laboratory (ARDL) in Mt. Vernon, IL for analysis. Analytical results are discussed in Section 3.1.4.

2.4. MATERIAL LOADING, TRANSPORTATION, AND DISPOSAL

All excavated materials (contaminated soil and concrete) were placed by the trackhoe excavator into a front-end loader and then directly into roll-off containers. Following completion of excavation, samples were collected for disposal profiling in accordance with the Work Plan (Ferguson-Harbour, 2001a). The roll-off containers were temporarily held on-site until the disposal analytical results had been obtained, waste profiles generated, and acceptance by disposal facility obtained. Following acceptance from the waste disposal facility, roll-off boxes were transported and the contents disposed. Transportation of the excavated materials was conducted in accordance with the Work Plan (Ferguson-Harbour, 2001a). The roll-off containers were lined with plastic prior to loading to eliminate the need for decontamination, and the loaded containers were tarped to contain wind borne particulate matter that could escape during transport. The excavated soils were transported to Woodland Landfill, South Elgin, Illinois and the concrete was transported to Vulcan Materials Company, Elk Grove Village, Illinois.

Soil cuttings from borings at the Former Vehicle Inspection Pit (OTH-1) were placed in a single U.S. Department of Transportation (DOT) steel 55-gallon drum and staged inside the OMS Building until transportation and disposal was arranged. Following completion of field activities, a sample of the soil cuttings was collected for disposal profiling in accordance with the Work Plan (Ferguson-Harbour, 2001a). Following acceptance from the waste disposal facility, the 55-gallon drum was placed into a contaminated soil roll-off container, transported, and the contents disposed at the Woodland Landfill, South Elgin, Illinois.

The buried drum from the Former Shop Sink (OTH-2) excavation was placed in a 75-gallon over pack drum and staged inside the OMS Building until transportation and disposal was arranged. Following completion of field activities, a sample of the drum contents (pea gravel) was collected for disposal profiling. Following acceptance from the waste disposal facility, the drum

was placed into a contaminated soil roll-off container, transported, and the contents disposed at the Woodland Landfill, South Elgin, Illinois.

All wastewater (i.e., decontamination water and tank cleaning fluids) generated during the field work was collected and placed in a single fully enclosed poly tank, staged near the Oil-Water Separator (OWS-1) excavation. Following completion of field activities, a sample of the water was collected for disposal profiling in accordance with the Work Plan (Ferguson-Harbour, 2001a). Following acceptance from the waste disposal facility, the wastewater was transported by vacuum truck to RS Used Oil Services Inc, Chicago, IL for disposal.

Copies of the waste manifests and shipping manifests are included in Appendix C.

2.5. EXCAVATION BACKFILLING

The excavations at the Former Shop Sink (OTH-2), Former Vehicle Wash Rack (OTH-3), and Oil-Water Separator (OWS-1) were backfilled with CA-6 crushed limestone gravel obtained from an off-site source. Approximately 60 cubic yards of CA-6 gravel was used as backfill. The backfill material was placed in the excavation in approximately 1-foot lifts and compacted in-place using a gasoline powered vibrating compactor. To prevent rainwater from direct contact with any potentially contaminated soil remaining in the excavation area, the open excavations were lined with poly sheeting and were weighed down while the excavations were open after sampling and before the backfilling.

2.6. EMISSION AND EROSION CONTROL

Organic vapors did not pose a concern during the demolition activities and did not require any upgrades in the level of personal protection based on the criteria specified in the Health and Safety Plan (Ferguson-Harbour, 2001b). Dust was monitored by visually during soil excavation, loading, and transportation activities. Due to the limited amount of excavated soils and the limited traffic, dust generation did not pose a problem. Roll-off containers were tarped prior to leaving the site to control particulate emissions during transportation.

The need for erosion controls was reduced by the use of roll-off containers for construction debris and excavated soils. There was no rainfall throughout the fieldwork. Therefore, no additional erosion control measures were required.

2.7. SITE RESORATION AND EQUIPMENT DECONTAMINATION

At the Oil-Water Separator (OWS-1), topsoil was placed at the ground surface in the immediate area of the excavation. Grass seed was then raked into the topsoil. All other excavated areas were dressed out with CA-6 crushed limestone gravel and compacted at the surface. A fencing contractor repaired the portion of fence removed during the excavation at the Oil-Water Separator (OWS-1) site. The boreholes at the Former Vehicle Inspection Pit (OTH-1) were backfilled with CA-6 crushed limestone gravel and the holes in the concrete were plugged using an epoxy grout.

Prior to removal from the Ft Dearborn USARC and between each work site, excavation equipment was scraped clean to remove any potentially contaminated soil. Potentially contaminated soil removed during this process was collected and handled in the same manner as excavated soils (see Section 2.4). Decontamination of field sampling equipment was performed in accordance with the Field Sampling Plan (Ferguson-Harbour, 2002a).

2.8. INSPECTION AND OVERSIGHT

Inspections were performed by Ferguson-Harbour personnel on a continuous basis throughout the duration of field activities. Inspections were performed to identify the presence of visually contaminated soils, to check that the required excavation depths were maintained, to check that the required samples were collected and appropriate sampling procedures utilized, to check for safe work practices and personal protective equipment (PPE) guidelines, and to check that proper decontamination of equipment was performed.

The IEPA provided regular field oversight throughout the project. The IEPA oversight person, Ms. Rebecca Oswald, Environmental Protection Specialist, collected photographic documentation of the project, communicated with the IEPA Project Manager regarding field decisions and observations, and oversaw sample collection activities.

The USACE provided regular field oversight throughout the project. USACE personnel checked that the field activities were being performed in accordance with the Work Plan (Ferguson-Harbour, 2001a), provided additional health and safety and site control inspections, and communicated with the USACE Project Manager regarding the status and general quality of the fieldwork. USACE personnel were supported by MWH during portions of the fieldwork to observe the work.

3.0 SAMPLING AND LABORATORY ANALYSIS

Site characterization and waste characterization samples were collected at the locations and frequency specified in the Work Plan (Ferguson-Harbour, 2001a). Sample collection and handling was completed in accordance with the methods and procedures specified in the Field Sampling Plan (Ferguson-Harbour, 2002a). Samples were analyzed for chemicals of potential concern using the analytical methods outlined in the Quality Assurance Project Plan (Ferguson-Harbour, 2002b). Samples were shipped via overnight delivery service to Applied Research & Development Laboratory (ARDL) in Mt. Vernon, IL for analysis. A summary of the sampling activities conducted for site characterization at individual site locations is outlined in Section 3.1. Waste disposal characterization sampling is summarized in Section 3.2. Copies of the laboratory analytical reports and the accompanying chain-of-custody forms are presented in Appendix D. A summary of the site characterization sample results is presented in Table 1.

3.1. SITE CHARACTERIZATION SAMPLING

3.1.1 Former Vehicle Inspection Pit (OTH-1)

Four soil borings were drilled to depths of six feet each in the area of the Former Vehicle Inspection Pit (OTH-1). One soil sample from each boring (FIP-001-06-SSS, FIP-002-06-SSS, FIP-003-06-SSS, FIP-004-06-SSS) was collected at the locations and depths indicated on Figure 6. Samples were analyzed for Target Analyte List (TAL) metals, semi-volatile organic compounds (SVOCs), polynuclear aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), and polychlorinated biphenyls (PCBs).

No organic chemicals were detected exceeding either USEPA Region IX PRGs (industrial) or TACO Tier 1 (industrial and residential) criteria were detected. Organic chemicals detected at the site below USEPA Region IX PRGs and TACO Tier 1 criteria included: the VOCs *methylene chloride* and *cis-1,3-Dichloropropene* in each sample, and *acetone* in sample FIP-002-06-SSS; the PAHs *benzo(a)pyrene* in samples FIP-002-06-SSS and FIP-004-06-SSS, *benzo(g,h,i)perylene* in samples FIP-002-06-SSS, FIP-003-06-SSS and FIP-004-06-SSS, *chrysene* in sample FIP-004-06-SSS, and *fluoranthene* and *pyrene* in each sample; and the SVOCs *benzylbutylphthalate* in samples FIP-002-06-SSS and FIP-003-06-SSS, and *bis(2-ethylhexyl)phthalate* in sample FIP-002-06-SSS. No PCBs were detected in any sample.

Arsenic exceeded the USEPA Region IX industrial PRG of 1.6 mg/kg in each sample. The highest detected arsenic concentration detected at the site (14 mg/kg) was reported in sample FIP-001-06-SSS and marginally exceeded the TACO Tier 1 residential (ingestion) criteria and

the background concentration for the region of 13 mg/kg, as provided in 35 IAC §724.405(b). Arsenic concentrations in the three other samples analyzed at this site ranged from 8.6 to 11.6 mg/kg, below the TACO comparative criteria used. All detected arsenic concentrations were below TACO Tier 1 construction worker, industrial/construction worker, residential inhalation, and migration to Class I groundwater pathways. No other inorganic chemicals exceeded either USEPA Region IX PRGs (industrial) or TACO Tier 1 (industrial and residential) criteria.

3.1.2 Former Shop Sink (OTH-2)

A total of six field soil samples (FSS-001-04-ESW, FSS-002-04-ESW, FSS-003-04-ESW, FSS-004-04-ESW, FSS-005-08-EBT, and FSS-006-05-EBT) were collected for laboratory chemical analysis from the walls and floor of the excavation at OTH-2. Sample locations and depths are illustrated on Figure 3. Each sample was analyzed for TAL metals, SVOCs, PAHs, VOCs, and PCBs.

No organic chemicals exceeding either USEPA Region IX PRGs (industrial) or TACO Tier 1 (industrial and residential) criteria were detected. Organic chemicals detected in one or more samples at the site below USEPA Region IX PRGs and TACO Tier 1 criteria included: the VOC *ethylbenzene*; the PAHs *acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluorathene, benzo(g,h,i)perylene, benzo(k)fluorathene, chrysene, dibenzo(a,h)anthracene, flouranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene,* and *pyrene*; and the SVOCs *2-methylnaphthalene, benzylbutylphthalate,* and *di-n-butylphthalate.* No PCBs were detected in any sample.

Arsenic exceeded the USEPA Region IX industrial PRG of 1.6 mg/kg in each sample. The detected arsenic concentrations ranged from 7.4 to 12 mg/kg, below the TACO Tier 1 construction worker, industrial/construction worker, residential, and migration to Class I groundwater pathways, and the background concentration for the region of 13 mg/kg. No other inorganic chemicals exceeded either USEPA Region IX PRGs (industrial) or TACO Tier 1 (industrial and residential) criteria.

3.1.3 Former Vehicle Wash Rack (OTH-3)

A total of eight field soil samples (VWR-001-03-EBT, VWR-001-03-ESW, VWR-002-02-ESW, VWR-003-02-ESW, VWR-004-02-ESW, VWR-005-02-EBT, VWR-006-02-EBT and VWR-007-04-EBT) were collected for laboratory chemical analysis from the walls and floor of

the excavation at OTH-3. Sample locations and depths are illustrated on Figure 4. Each sample was analyzed for TAL metals, SVOCs, PAHs, VOCs, ethylene glycol, and PCBs.

No organic chemicals exceeding either USEPA Region IX PRGs (industrial) or TACO Tier 1 (industrial) criteria were detected. *Benzo(a)pyrene* (167 μg/kg) in sample VWR-002-02-ESW was the only organic chemical detected that exceeded TACO Tier 1 (residential) criteria and marginally exceeded the inhalation pathway criterion (90 μg/kg). Organic chemicals detected in one or more samples at the site below USEPA Region IX PRGs and TACO Tier 1 (industrial) criteria included: the PAHs *acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluorathene, benzo(g,h,i)perylene, benzo(k)fluorathene, chrysene, dibenzo(a,h)anthracene, flouranthene, fluorene, indeno(1,2,3-cd)pyrene, phenanthrene,* and *pyrene*; and the SVOC *benzylbutylphthalate*; and the PCB *Arochlor-1260*. No VOCs or *Ethylene Glycol* was detected in any sample.

Arsenic exceeded the USEPA Region IX industrial PRG of 1.6 mg/kg in each sample. The detected arsenic concentrations ranged from 7.5 to 12.9 mg/kg, below the TACO Tier 1 construction worker, industrial/construction worker, residential, and migration to Class I groundwater pathways, and the background concentration for the region of 13 mg/kg. No other inorganic chemicals exceeded either USEPA Region IX PRGs (industrial) or TACO Tier 1 (industrial and residential) criteria.

3.1.4 Oil-Water Separator (OWS-1)

A total of six field soil samples (OWS-001-05-ESW, OWS-002-05-ESW, OWS-003-04-ESW, OWS-004-05-ESW, OWS-005-08-EBT, and OWS-006-08-EBT) were collected for laboratory chemical analysis from the walls and floor of the excavation at OWS-1. Sample locations and depths are illustrated on Figure 5. Each sample was analyzed for TAL metals, SVOCs, PAHs, VOCs, and PCBs.

No organic chemicals exceeding either USEPA Region IX PRGs (industrial) or TACO Tier 1 (industrial and residential) criteria were detected. Organic chemicals detected in one or more samples at the site below USEPA Region IX PRGs and TACO Tier 1 criteria included: the VOC *toluene*; the PAHs *anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluorathene, benzo(g,h,i)perylene, benzo(k)fluorathene, chrysene, flouranthene, fluorene, phenanthrene,* and *pyrene*; and the SVOC *benzylbutylphthalate*. No PCBs were detected in any sample.

Arsenic exceeded the USEPA Region IX industrial PRG of 1.6 mg/kg in each sample analyzed. The detected arsenic concentrations ranged from 6.3 to 10.3 mg/kg, well below the TACO Tier 1

construction worker, industrial/construction worker, residential, and migration to Class I groundwater pathways, and the background concentration for the region of 13 mg/kg. No other inorganic chemicals exceeded either USEPA Region IX PRGs (industrial) or TACO Tier 1 (industrial and residential) criteria.

3.1.5 Analytical Data Validation

All analytical data used in this report were subjected to data validation and found to be usable, except as specifically noted herein. A data validation report entitled *Data Validation Report for Various Site Remediations, Fort Dearborn USARC, Illinois* (MWH, 2003) was prepared and is included in Appendix E. The data validation report verified and validated the site characterization analytical data reported by the fixed laboratory, ARDL of Mt. Vernon, Illinois. The data validation was completed based on the criteria presented in the Quality Assurance Project Plan (Ferguson-Harbour, 2002b). Principal findings and conclusions of the data validation process are highlighted below:

- Based on the results of equipment tuning, initial calibration, initial calibration verification, and continuing calibration the data are considered precise as qualified.

- Based on the results of the holding time evaluation, the data for this project were considered accurate as qualified, except for those data that were qualified with an "R" flag. All extraction and holding times were met except for soil VOC sample VWR-001-03-ESW. The results were rejected and are not usable.

- Based on the results for internal standard recoveries, surrogate spike recoveries, laboratory control sample/laboratory control sample duplicate analyses, and matrix spike/matrix spike duplicate analyses the results are precise as qualified.

- Trace concentrations of methylene chloride were detected in the method and trip blanks. Methylene chloride is recognized by the USEPA as a common laboratory contaminant. The reported methylene chloride values are attributed to laboratory contamination and not representative of site conditions.

- Trace concentrations of methylene chloride, acetone, chloroform and toluene were detected in the equipment rinseate blanks. Methylene chloride and acetone are attributed to laboratory contamination and are not representative of site conditions. Chloroform and toluene were not detected in any of the associated samples.

- All investigative and quality control (QC) samples were collected as scheduled. Sample collection completeness is 100 percent.

- The analytical completeness was 100 percent for all analyses except soil VOCs. The soil VOCs had a completeness of 96 percent due to the rejected soil VOC sample, which exceeded the completeness goal of 90 percent.

Overall, the data collected were of sufficient quality and quantity for intended data end use.

In addition, a minimum of 10% of the data was fully validated by an independent USACE contractor, Lee A. Knupple and Associates, Inc. of Montgomery, Ohio. Copies of the independent validation report were submitted separately.

3.2. WASTE DISPOSAL SAMPLING

A total of 75 cubic yards of soil and 90 cubic yards of concrete were excavated from the Former Shop Sink (OTH-2), the Former Vehicle Wash Rack (OTH-3), and the Oil-Water Separator (OWS-1) sites. Five roll-off containers were filled with soil and six containers were filled with concrete. Composite and discrete samples of the excavated soil were collected for disposal profiling. Two composite and discrete samples of the soil and two composite and discrete samples of the concrete were collected for waste characterization purposes. The composite samples were analyzed for Toxicity Characteristics Leaching Procedure (TCLP) SVOCs, TCLP metals, TCLP PCBs, pH, paint filter, and flash point. The discrete samples were analyzed for TCLP VOCs. Based on the analytical results, the soil was determined to be non-hazardous waste in accordance with the criteria specified in 35 IAC §721.121, §721.122 and §721.124. The loading, transportation, and disposal of the waste materials are discussed in Section 2.4.

A total of 790 gallons of wastewater was generated during this project and was placed in a single fully enclosed poly tank. One sample of the wastewater was collected for waste characterization purposes. The sample was analyzed for TAL metals, VOCs, PCBs, SVOCs, flashpoint, and pH. Based on the analytical results, the water was determined to be non-hazardous waste in accordance with the criteria specified in 35 IAC §721.121, §721.122 and §721.124. The loading, transportation, and disposal of the waste materials are discussed in Section 2.4.

One 55-gallon drum of soil cuttings from the former vehicle inspection pit (OTH-1) investigation was generated during this project. One composite and one discrete sample of the soil cuttings were collected for waste characterization purposes. The composite sample was analyzed for TCLP SVOCs, TCLP metals, TCLP PCBs, pH, paint filter, and flash point and the discrete

sample was analyzed for TCLP VOCs. Based on the analytical results, the soil cuttings were determined to be non-hazardous waste in accordance with the criteria specified in 35 IAC §721.121, §721.122 and §721.124. The loading, transportation, and disposal of the waste materials are discussed in Section 2.4.

One composite sample and one discrete sample of the contents of the former buried drum at the Former Shop Sink (OTH-2) were collected for waste characterization purposes. The composite sample was analyzed for TCLP SVOCs, TCLP metals, TCLP PCBs, pH, paint filter, and flash point and the discrete sample was analyzed for TCLP VOCs. Based on the analytical results, the drum contents were determined to be non-hazardous waste in accordance with the criteria specified in 35 IAC §721.121, §721.122 and §721.124. The loading, transportation, and disposal of the waste materials are discussed in Section 2.4.

4.0 FINDINGS AND RECOMENDATIONS

This CCR presents the results of demolition activities completed at the Former Vehicle Inspection Pit (OTH-1), Former Shop Sink (OTH-2), Former Vehicle Wash Rack (OTH-3), and Oil-Water Separator (OWS-1) sites at the Fort Dearborn U.S. Army Reserve Center (USARC) 6540 N. Mannheim Road, Chicago, Illinois. Demolition activities were completed between 10 September 2002 and 18 September 2002 by Ferguson-Harbour, Inc., Groveport, Ohio under contract to the USACE. Principal findings are summarized below:

1. No obvious visual evidence of contamination was observed during field activities at the Former Vehicle Inspection Pit (OTH-1), the Former Vehicle Wash Rack (OTH-3), and the Oil-Water Separator (OWS-1) sites.

2. Stained soils in the immediate vicinity of the buried drum at the Former Shop Sink (OTH-2) were observed during excavation activities and removed.

3. No organic chemicals exceeding either USEPA Region IX PRGs (industrial) or TACO Tier 1 industrial criteria were detected. All organic chemicals detected were also below TACO Tier 1 residential criteria, except benzo(a)pyrene (167 μg/kg) in sample VWR-002-02-ESW at the Former Vehicle Wash Rack (OTH-3) which marginally exceeded the inhalation pathway criterion (90 μg/kg).

4. No metals, except arsenic, were detected at concentrations exceeding USEPA Region IX (industrial) PRGs and/or regional background concentrations.

5. Arsenic exceeded the USEPA Region IX PRG (industrial) of 1.6 mg/kg in each of the 28 samples analyzed. Concentrations ranged from 6.3 to 14 mg/kg. All arsenic concentrations were below the regional background concentration (13 mg/kg) except sample FIP-001-06-SSS at the Former Vehicle Inspection Pit (OTH-1), which marginally exceeded the regional background concentration at 14 mg/kg. Arsenic concentrations in the three other samples analyzed at OTH-1 ranged from 8.6 to 11.6 mg/kg, below the regional background concentration.

6. All metal concentrations were below TACO Tier 1 construction worker, industrial/construction worker, residential inhalation, and migration to Class I groundwater pathway criteria.

Based on these findings, no further action is recommended at the Former Vehicle Inspection Pit (OTH-1), the Former Shop Sink (OTH-2), the Former Vehicle Wash Rack (OTH-3) and the Oil/Water Separator (OWS-1) sites.

5.0 REFERENCES

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TABLES

Table 1
Analytical Data Summary
Fort Dearborn, USARC, Chicago, IL
Various Sites Remediations

Parameter	Region 9 Industrial PRG	TACO Tier 1 Soil Remediation Objectives							Soil Sample Analytical Results							
		CWING	CWINH	ICING	ICINH	RESING	RESINH	SC1GW	FIP-001-06-SSS	FIP-002-06-SSS	FIP-003-06-SSS	FIP-004-06-SSS	FSS-001-04-ESW	FSS-002-04-ESW	FSS-003-04-ESW	FSS-004-04-ESW
SVOCs(ug/kg)																
1,2,4-Trichlorobenzene	3.0E+06	2000000	920000	20000000	3200000	780000	3200000	5000	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U
1,2-Dichlorobenzene	3.7E+05	18000000	310000	180000000	560000	7000000	560000	17000	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U
1,3-Dichlorobenzene	6.3E+04	--	--	--	--	--	--	--	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U
1,4-Dichlorobenzene	7.9E+03	--	340000	--	17000000	--	11000000	2000	6.1 UJ	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U
2,4,5-Trichlorophenol	6.2E+07	200000000	--	200000000	--	7800000	--	270000	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U
2,4,6-Tribromophenol	--	--	--	--	--	--	--	--	1480 =	1690 =	1620 =	1720 =	3120 =	3590 =	3130 =	2950 =
2,4-Dichlorophenol	1.8E+06	610000	--	6100000	--	230000	--	1000	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U
2,4-Dimethylphenol	1.2E+07	41000000	--	41000000	--	1600000	--	9000	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U
2,4-Dinitrophenol	1.2E+06	410000	--	4100000	--	160000	--	200	405 UJ	423 UJ	406 UJ	411 UJ	411 UJ	419 UJ	400 UJ	404 U
2,4-Dinitrotoluene	1.2E+06	180000	--	8400	--	900	--	0.8	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U
2,6-Dinitrotoluene	6.2E+05	180000	--	8400	--	900	--	0.7	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U
2-Chloronaphthalene	2.3E+07	--	--	--	--	--	--	--	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U
2-Chlorophenol	2.4E+05	10000000	53000000	10000000	53000000	390000	53000000	4000	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U
2-Methylnaphthalene	--	61000000	--	61000000	--	2300000	--	29000	405 U	423 U	406 U	411 U	411 U	419 U	99.2 J	404 U
2-Methylphenol (O-Cresol)	3.1E+07	100000000	--	100000000	--	3900000	--	15000	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U
2-Nitroaniline	1.8E+04	--	--	--	--	--	--	--	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U
2-Nitrophenol	--	--	--	--	--	--	--	--	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U
3,3'-Dichlorobenzidine	3.8E+03	280000	--	13000	--	1000	--	7	405 UJ	423 UJ	406 U	411 UJ	411 UJ	419 UJ	400 UJ	404 U
3-Nitroaniline	--	--	--	--	--	--	--	--	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U
4,6-Dinitro-2-methylphenol	--	--	--	--	--	--	--	--	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U
4-Bromophenyl Phenyl Ether	--	--	--	--	--	--	--	--	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U
4-Chloro-3-methylphenol	--	--	--	--	--	--	--	--	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U
4-Chlorophenyl Phenyl Ether	--	--	--	--	--	--	--	--	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U
4-Methylphenol (P-Cresol)	3.1E+06	--	--	--	--	--	--	--	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U
4-Nitroaniline	--	--	--	--	--	--	--	--	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U
4-Nitrophenol	--	--	--	--	--	--	--	--	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U
Benzyl Butyl Phthalate	1.0E+08	410000000	930000	410000000	930000	16000000	930000	930000	405 U	952 =	77.3 J	411 U	411 U	419 U	400 U	404 U
Bis(2-Chloroethoxy) Methane	--	--	--	--	--	--	--	--	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U
Bis(2-Chloroethyl) Ether	5.5E+02	75000	660	5000	470	600	200	0.4	405 UJ	423 U	406 UJ	411 UJ	411 U	419 U	400 U	404 U
Bis(2-Chloroisopropyl) Ether	7.4E+03	--	--	--	--	--	--	--	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U
Bis(2-Ethylhexyl) Phthalate	1.2E+05	4100000	31000000	410000	31000000	46000	31000000	3600000	405 U	124 J	406 U	411 U	411 U	419 U	400 U	404 U
Dibenzofuran	3.1E+06	--	--	--	--	--	--	--	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U
Diethyl Phthalate	1.0E+08	1000000000	2000000	1000000000	2000000	63000000	2000000	470000	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U
Dimethyl Phthalate	1.0E+08	--	--	--	--	--	--	--	405 U	423 U	406 U	411 U	411 UJ	419 UJ	400 UJ	404 UJ
Di-N-Butyl Phthalate	6.2E+07	200000000	2300000	200000000	2300000	7800000	2300000	2300000	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U
Di-N-Octylphthalate	2.5E+07	4100000	10000000	41000000	10000000	1600000	10000000	10000000	405 U	423 UJ	406 U	411 U	411 U	419 U	400 U	404 U
Hexachlorobenzene	1.1E+03	78000	2600	4000	1800	400	1000	2000	405 UJ	423 UJ	406 U	411 UJ	411 U	419 U	400 U	404 U
Hexachlorobutadiene	2.2E+04	--	--	--	--	--	--	--	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U
Hexachlorocyclopentadiene	3.7E+06	14000000	1100	14000000	16000	550000	10000	400000	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U
Hexachloroethane	1.2E+05	2000000	--	2000000	--	78000	--	500	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U
Isophorone	1.8E+06	410000000	4600000	410000000	4600000	15600000	4600000	8000	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U
Nitrobenzene	1.0E+05	1000000	9400	1000000	140000	39000	92000	100	405 UJ	423 U	406 UJ	411 UJ	411 U	419 U	400 U	404 U
N-Nitrosodi-N-Propylamine	2.5E+02	18000	--	800	--	90	--	0.05	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U
N-Nitrosodiphenylamine	3.5E+05	25000000	--	1200000	--	130000	--	1000	405 UJ	423 U	406 UJ	411 UJ	411 U	419 U	400 U	404 U
Pentachlorophenol	9.0E+03	520000	--	24000	--	3000	--	30	405 U	423 U	406 U	411 U	411 UJ	419 UJ	400 UJ	404 U
Phenol	1.0E+08	120000000	--	1000000000	--	47000000	--	100000	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U

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Various Sites Remediations

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Parameter	Region 9 Industrial PRG	CWING	CWINH	ICING	ICINH	RESING	RESINH	SC1GW	FIP-001-06-SSS	FIP-002-06-SSS	FIP-003-06-SSS	FIP-004-06-SSS	FSS-001-04-ESW	FSS-002-04-ESW	FSS-003-04-ESW	FSS-004-04-ESW
VOCs(ug/kg)																
1,1,1-Trichloroethane	1.2E+06	--	1200000	--	1200000	--	1200000	2000	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U
1,1,2,2-Tetrachloroethane	9.3E+02	--	--	--	--	--	--	--	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U
1,1,2-Trichloroethane	1.6E+03	8200000	1800000	8200000	1800000	310000	1800000	20	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U
1,1-Dichloroethane	1.7E+06	200000000	130000	200000000	1700000	7800000	1300000	23000	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U
1,1-Dichloroethene	4.1E+05	1800000	300000	18000000	1500000	700000	1500000	60	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U
1,2-Dichloroethane	6.0E+02	1400000	990	63000	700	7000	400	20	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U
1,2-Dichloropropane	7.4E+02	1800000	500	84000	23000	9000	15000	30	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U
2-Hexanone	--	--	--	--	--	--	--	--	24.5 U	25.6 U	24.6 U	24.9 U	24.9 U	25.4 U	24.2 U	24.5 U
Acetone	6.0E+06	200000000	100000000	200000000	100000000	7800000	100000000	16000	61.3 U	71.9 =	61.5 U	62.3 U	62.3 U	63.5 U	60.5 U	61.3 U
Benzene	1.3E+03	2300000	2200	100000	1600	12000	800	30	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U
Bromochloromethane	--	--	--	--	--	--	--	--	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U
Bromodichloromethane	1.8E+03	2000000	3000000	92000	3000000	10000	3000000	600	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U
Bromoform	2.2E+05	16000000	140000	720000	100000	81000	53000	800	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U
Bromomethane	1.3E+04	1000000	3900	2900000	15000	110000	10000	200	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	12.1 U	12.3 U
Carbon disulfide	7.2E+05	20000000	9000	200000000	720000	7800000	720000	32000	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U
Carbon tetrachloride	5.5E+02	410000	900	44000	640	5000	300	70	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U
Chlorobenzene	5.3E+05	4100000	1300	41000000	210000	1600000	130000	1000	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U
Chloroethane	6.5E+03	--	--	--	--	--	--	--	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	12.1 U	12.3 U
Chloroform	1.2E+04	2000000	760	940000	540	100000	300	600	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U
Chloromethane	2.6E+03	--	--	--	--	--	--	--	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	12.1 U	12.3 U
cis-1,2-Dichloroethene	1.5E+05	20000000	1200000	20000000	1200000	780000	1200000	400	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U
cis-1,3-Dichloropropene	--	--	--	--	--	--	--	--	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U
Dibromochloromethane	2.6E+03	41000000	1300000	41000000	1300000	1600000	1300000	400	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U
Ethylbenzene	2.0E+04	20000000	58000	200000000	400000	7800000	400000	13000	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	4.5 J
Ethylene Glycol	1.0E+08	--	--	--	--	--	--	--								
m,p-Xylene (Sum Of Isomers)	4.2E+05	--	--	--	--	--	--	--	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	25.8 =
Methylene chloride	2.1E+04	12000000	34000	760000	24000	85000	13000	20	8 =	6.7 =	6.2 U	7.1 =	7.6 UB	6.2 UB	4.7 UB	5.5 UB
o-Xylene (1,2-Dimethylbenzene)	--	410000000	410000	1000000000	410000	160000000	410000	190000	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U
Styrene	1.7E+06	41000000	430000	410000000	1500000	16000000	1500000	4000	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U
Tetrachloroethene(PCE)	3.4E+03	2400000	28000	110000	20000	12000	11000	60	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U
trans-1,2-Dichloroethene	2.3E+05	41000000	3100000	41000000	3100000	1600000	3100000	700	6.1 UJ	6.4 UJ	6.2 UJ	6.2 UJ	6.2 U	6.3 U	6.1 U	6.1 U
trans-1,3-Dichloropropene	--	--	--	--	--	--	--	--	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U
Trichloroethene (TCE)	1.1E+02	1200000	12000	520000	8900	58000	5000	60	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U
Vinyl chloride	7.5E+02	170000	1100	7900	1100	460	200	10	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	12.1 U	12.3 U
Toluene	5.2E+05	410000000	42000	410000000	650000	16000000	650000	12000	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U

Table 1
Analytical Data Summary
Fort Dearborn, USARC, Chicago, IL
Various Sites Remediations

Parameter	Region 9 Industrial PRG	TACO Tier 1 Soil Remediation Objectives							Soil Sample Analytical Results							
		CWING	CWINH	ICING	ICINH	RESING	RESINH	SC1GW	FIP-001-06-SSS	FIP-002-06-SSS	FIP-003-06-SSS	FIP-004-06-SSS	FSS-001-04-ESW	FSS-002-04-ESW	FSS-003-04-ESW	FSS-004-04-ESW
PAHs(ug/kg)																
Acenaphthene	2.9E+07	120000000	--	120000000	--	4700000	--	570000	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	12.1 U	12.3 U
Acenaphthylene	--	61000000	--	61000000	--	2300000	--	15000	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	12.1 U	12.3 U
Anthracene	1.0E+08	610000000	--	610000000	--	23000000	--	12000000	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	5.1 J	5.8 J
Benzo(a)anthracene	2.1E+03	170000	--	8000	--	900	--	2000	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	11.6 J	9.1 J
Benzo(a)pyrene	2.1E+02	17000	--	800	--	90	--	8000	12.3 U	32 =	12.3 U	10.7 J	12.5 U	12.7 U	10.5 J	6.7 J
Benzo(b)fluoranthene	2.1E+03	170000	--	8000	--	900	--	5000	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	11.7 J	7.7 J
Benzo(g,h,i)perylene	--	61000000	--	61000000	--	2300000	--	16000000	12.3 U	23.9 =	3.8 J	9.1 J	12.5 U	12.7 U	13.2 =	6.5 J
Benzo(k)fluoranthene	2.1E+04	1700000	--	78000	--	9000	--	49000	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	7.5 J	6.4 J
Chrysene	2.1E+05	17000000	800000	780000	--	88000	--	160000	12.3 U	12.8 U	12.3 U	16.3 =	12.5 U	12.7 U	16.1 =	12.6 =
Dibenz(a,h)Anthracene	2.1E+02	17000	--	800	--	90	--	2000	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	12.1 U	12.3 U
Fluoranthene	2.2E+07	82000000	--	82000000	--	3100000	--	4300000	4.4 J	13.7 =	8.2 J	15.7 =	12.5 U	12.7 U	20.2 =	29.6 =
Fluorene	2.6E+07	82000000	--	82000000	--	3100000	--	560000	12.3 U	12.8 U	12.3 U	6.2 J	12.5 U	12.7 U	5.2 J	4.8 J
Indeno(1,2,3-CD)pyrene	2.1E+03	170000	--	8000	--	900	--	14000	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	7.7 J	4.3 J
Naphthalene	1.9E+05	4100000	1800	41000000	270000	1600000	170000	12000	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	34.9 =	12.3 U
Phenanthrene	--	61000000	--	61000000	--	2300000	--	140000	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	15.4 =	30.2 =
Pyrene	2.9E+07	61000000	--	61000000	--	2300000	--	4200000	10.3 J	48 =	23.5 =	36.9 =	12.5 U	12.7 U	26.8 =	26.3 =
PCBs/Pesticides (ug/kg)																
PCB-1016 (Arochlor 1016)	2.1E+04	--	--	--	--	--	--	--	40.5 U	42.3 U	40.6 U	41.1 U	41.1 U	41.9 U	40 U	40.4 U
PCB-1221 (Arochlor 1221)	7.4E+02	--	--	--	--	--	--	--	82.2 U	85.8 U	82.4 U	83.4 U	83.4 U	85 U	81.1 U	82.1 U
PCB-1232 (Arochlor 1232)	7.4E+02	--	--	--	--	--	--	--	40.5 U	42.3 U	40.6 U	41.1 U	41.1 U	41.9 U	40 U	40.4 U
PCB-1242 (Arochlor 1242)	7.4E+02	--	--	--	--	--	--	--	40.5 U	42.3 U	40.6 U	41.1 U	41.1 U	41.9 U	40 U	40.4 U
PCB-1248 (Arochlor 1248)	7.4E+02	--	--	--	--	--	--	--	40.5 U	42.3 U	40.6 U	41.1 U	41.1 U	41.9 U	40 U	40.4 U
PCB-1254 (Arochlor 1254)	7.4E+02	--	--	--	--	--	--	--	40.5 U	42.3 U	40.6 U	41.1 U	41.1 U	41.9 U	40 U	40.4 U
PCB-1260 (Arochlor 1260)	7.4E+02	--	--	--	--	--	--	--	40.5 U	42.3 U	40.6 U	41.1 U	41.1 U	41.9 U	40 U	40.4 U
Inorganics (mg/kg)																
Aluminum	1.0E+05	--	--	--	--	--	--	--	8750 =	10300 =	8380 =	7710 =	14800 =	14400 =	8100 =	10300 =
Antimony	4.1E+02	82	--	820	--	31	--	5	1 J	0.84 =	0.82 =	1.1 =	1.3 =	1.3 =	1.1 =	1.3 =
Arsenic	1.6E+00	61	25000	--	1200	13	750	31	**14 =**	**8.6 =**	**8.9 =**	**9.8 =**	**11.6 =**	**10.9 =**	**9.2 =**	**7.4 =**
Barium	6.7E+04	14000	870000	140000	910000	5500	690000	2100	60.4 =	88.3 =	70.8 =	61.2 =	94.2 =	93.9 =	56.1 =	85.7 =
Beryllium	1.9E+03	410	44000	4100	2100	160	1300	8000	0.44 =	0.38 =	0.28 =	0.33 =	0.86 =	0.81 =	0.47 =	0.6 =
Cadmium	4.5E+02	200	59000	2000	2800	78	1800	430	0.25 U	0.26 U	0.25 U	0.25 U	0.62 =	0.51 U	0.48 U	0.5 =
Calcium	--	--	--	--	--	--	--	--	31200 =	29000 =	35400 =	37500 =	3030 =	7930 =	25000 =	14600 =
Chromium, Total	4.5E+02	4100	690	6100	420	230	270	--	16.3 =	17.8 =	13.8 =	12.9 =	20.6 =	21.2 =	12.2 =	13.8 =
Cobalt	1.9E+03	12000	--	120000	--	4700	--	--	13.6 =	10.2 =	7.9 =	8.9 =	12.9 =	13.7 =	8.7 =	9 =
Copper	4.1E+04	8200	--	82000	--	2900	--	330000	56.3 J	34.3 =	32.7 =	36.7 =	31.9 =	34.4 =	25.7 =	23.7 =
Iron	1.0E+05	--	--	--	--	--	--	--	27600 =	22500 =	20100 =	20200 =	26300 =	26100 =	17000 =	17000 =
Lead	7.5E+02	400	--	400	--	400	--	--	25.3 =	30.5 =	14.7 =	18.7 =	18.6 =	16.9 =	21.5 =	102 =
Magnesium	--	--	--	--	--	--	--	--	22100 =	19900 =	24900 =	24900 =	4770 =	8290 =	16700 =	9630 =
Manganese	1.9E+04	9600	8700	96000	91000	3700	69000	--	606 =	470 =	384 =	413 =	651 =	541 =	396 =	338 =
Mercury	3.1E+02	61	52000	610	540000	23	10	6.4	0.098 U	0.1 U	0.098 U	0.1 U	0.1 U	0.1 U	0.097 U	0.098 U
Nickel	2.0E+04	4100	440000	41000	21000	1600	13000	3800	39 J	27.7 =	22.9 =	25.4 =	32.3 =	36 =	17.9 =	18.6 =
Potassium	--	--	--	--	--	--	--	--	1580 =	1250 =	1180 =	1330 =	1590 =	1620 =	1360 =	1250 =
Selenium	5.1E+03	1000	--	10000	--	390	--	2.4	0.61 U	0.94 =	0.62 U	0.62 U	0.94 =	0.63 U	0.61 U	0.61 U
Silver	5.1E+03	1000	--	10000	--	390	--	110	0.61 U	0.64 U	0.62 U	0.62 U	0.62 U	0.63 U	0.61 U	0.61 U
Sodium	--	--	--	--	--	--	--	--	49.1 U	51.2 U	49.2 U	64.6 =	81.8 =	90.1 =	89.3 =	132 =
Thallium	6.7E+01	160	--	160	--	6.3	--	3.8	0.37 U	0.38 U	0.37 U	0.37 U	0.37 U	0.38 U	0.36 U	0.37 U

Table 1
Analytical Data Summary
Fort Dearborn, USARC, Chicago, IL
Various Sites Remediations

		TACO Tier 1 Soil Remediation Objectives							Soil Sample Analytical Results							
Parameter	Region 9 Industrial PRG	CWING	CWINH	ICING	ICINH	RESING	RESINH	SC1GW	FIP-001-06-SSS	FIP-002-06-SSS	FIP-003-06-SSS	FIP-004-06-SSS	FSS-001-04-ESW	FSS-002-04-ESW	FSS-003-04-ESW	FSS-004-04-ESW
Vanadium	7.2E+03	1400	--	14000	--	550	--	980	19.6 =	20.7 =	15.5 =	13.7 =	27.5 =	26.1 =	16.5 =	20.9 =
Zinc	1.0E+05	61000	--	610000	--	23000	--	53000	67 =	57.1 =	48.5 =	57.6 =	54.3 =	53.8 =	56.7 =	51.3 =

Notes:

	Exceeds TACO Tier 1 Soil ROs for residential ingestion pathway
Bold	Exceeds Region 9 PRGs (October 2002) for industrial soil
CWING	TACO Tier 1 Soil RO for construction worker ingestion pathway
CWINH	TACO Tier 1 Soil RO for construction worker inhalation pathway
ICING	TACO Tier 1 Soil RO for industrial/commercial worker ingestion pathway
ICINH	TACO Tier 1 Soil RO for industrial/commercial worker inhalation pathway
RESING	TACO Tier 1 Soil RO for residential ingestion pathway
RESINH	TACO Tier 1 Soil RO for residential inhalation pathway
SC1GW	TACO Tier 1 Soil RO for soil component of the groundwater ingestion pathway (Class I) Soil pH ranges 8-10. Soil component of the groundwater ingestion pathway for metals depends on the pH value. Use values at pH = 8.
U	Sample is not detected
J	Reported concentration is estimated
=	Sample is detected at the reported concentration
--	Not available

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Analytical Data Summary
Fort Dearborn, USARC, Chicago, IL
Various Sites Remediations

Parameter	Region 9 Industrial PRG	TACO Tier 1 Soil Remediation Objectives							Soil Sample Analytical Results							
		CWING	CWINH	ICING	ICINH	RESING	RESINH	SC1GW	FSS-005-08-EBT	FSS-006-05-EBT	OWS-001-05-ESW	OWS-002-05-ESW	OWS-003-04-ESW	OWS-004-05-ESW	OWS-005-08-EBT	OWS-006-08-EBT
SVOCs(ug/kg)																
1,2,4-Trichlorobenzene	3.0E+06	2000000	920000	20000000	3200000	780000	3200000	5000	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
1,2-Dichlorobenzene	3.7E+05	18000000	310000	180000000	560000	7000000	560000	17000	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
1,3-Dichlorobenzene	6.3E+04	--	--	--	--	--	--	--	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
1,4-Dichlorobenzene	7.9E+03	--	340000	--	17000000	--	11000000	2000	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
2,4,5-Trichlorophenol	6.2E+07	200000000	--	200000000	--	7800000	--	270000	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
2,4,6-Tribromophenol	--	--	--	--	--	--	--	--	2630 =	2380 =	2530 =	2500 =	2220 =	2610 =	3210 =	2940 =
2,4-Dichlorophenol	1.8E+06	610000	--	6100000	--	230000	--	1000	407 U	402 U	416 U	413 U	378 U	403 U	395 UJ	374 UJ
2,4-Dimethylphenol	1.2E+07	41000000	--	41000000	--	1600000	--	9000	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
2,4-Dinitrophenol	1.2E+06	410000	--	4100000	--	160000	--	200	407 U	402 U	416 U	413 UJ	378 UJ	403 U	395 UJ	374 UJ
2,4-Dinitrotoluene	1.2E+06	180000	--	8400	--	900	--	0.8	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
2,6-Dinitrotoluene	6.2E+05	180000	--	8400	--	900	--	0.7	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
2-Chloronaphthalene	2.3E+07	--	--	--	--	--	--	--	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
2-Chlorophenol	2.4E+05	10000000	53000000	10000000	53000000	390000	53000000	4000	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
2-Methylnaphthalene	--	61000000	--	61000000	--	2300000	--	29000	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
2-Methylphenol (O-Cresol)	3.1E+07	100000000	--	100000000	--	3900000	--	15000	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
2-Nitroaniline	1.8E+04	--	--	--	--	--	--	--	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
2-Nitrophenol	--	--	--	--	--	--	--	--	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
3,3'-Dichlorobenzidine	3.8E+03	280000	--	13000	--	1000	--	7	407 U	402 U	416 U	413 U	378 U	403 UJ	395 UJ	374 U
3-Nitroaniline	--	--	--	--	--	--	--	--	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
4,6-Dinitro-2-methylphenol	--	--	--	--	--	--	--	--	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
4-Bromophenyl Phenyl Ether	--	--	--	--	--	--	--	--	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
4-Chloro-3-methylphenol	--	--	--	--	--	--	--	--	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
4-Chlorophenyl Phenyl Ether	--	--	--	--	--	--	--	--	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
4-Methylphenol (P-Cresol)	3.1E+06	--	--	--	--	--	--	--	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
4-Nitroaniline	--	--	--	--	--	--	--	--	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
4-Nitrophenol	--	--	--	--	--	--	--	--	407 U	402 U	416 U	413 UJ	378 UJ	403 U	395 U	374 U
Benzyl Butyl Phthalate	1.0E+08	410000000	930000	410000000	930000	16000000	930000	930000	1310 =	123 J	416 U	413 U	378 U	403 U	395 U	374 U
Bis(2-Chloroethoxy) Methane	--	--	--	--	--	--	--	--	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
Bis(2-Chloroethyl) Ether	5.5E+02	75000	660	5000	470	600	200	0.4	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
Bis(2-Chloroisopropyl) Ether	7.4E+03	--	--	--	--	--	--	--	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
Bis(2-Ethylhexyl) Phthalate	1.2E+05	4100000	31000000	410000	31000000	46000	31000000	3600000	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
Dibenzofuran	3.1E+06	--	--	--	--	--	--	--	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
Diethyl Phthalate	1.0E+08	1000000000	2000000	1000000000	2000000	63000000	2000000	470000	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
Dimethyl Phthalate	1.0E+08	--	--	--	--	--	--	--	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 UJ
Di-N-Butyl Phthalate	6.2E+07	200000000	2300000	200000000	2300000	7800000	2300000	2300000	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
Di-N-Octylphthalate	2.5E+07	4100000	10000000	41000000	10000000	1600000	10000000	10000000	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
Hexachlorobenzene	1.1E+03	78000	2600	4000	1800	400	1000	2000	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
Hexachlorobutadiene	2.2E+04	--	--	--	--	--	--	--	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Hexachlorocyclopentadiene	3.7E+06	14000000	1100	14000000	16000	550000	10000	400000	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
Hexachloroethane	1.2E+05	2000000	--	2000000	--	78000	--	500	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
Isophorone	1.8E+06	410000000	4600000	410000000	4600000	15600000	4600000	8000	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
Nitrobenzene	1.0E+05	1000000	9400	1000000	140000	39000	92000	100	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
N-Nitrosodi-N-Propylamine	2.5E+02	18000	--	800	--	90	--	0.05	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
N-Nitrosodiphenylamine	3.5E+05	25000000	--	1200000	--	130000	--	1000	407 U	402 U	416 U	413 U	378 U	403 U	395 UJ	374 UJ
Pentachlorophenol	9.0E+03	520000	--	24000	--	3000	--	30	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U
Phenol	1.0E+08	120000000	--	1000000000	--	47000000	--	100000	407 U	402 U	416 U	413 U	378 U	403 U	395 U	374 U

Table 1
Analytical Data Summary
Fort Dearborn, USARC, Chicago, IL
Various Sites Remediations

Parameter	Region 9 Industrial PRG	TACO Tier 1 Soil Remediation Objectives							Soil Sample Analytical Results							
		CWING	CWINH	ICING	ICINH	RESING	RESINH	SC1GW	FSS-005-08-EBT	FSS-006-05-EBT	OWS-001-05-ESW	OWS-002-05-ESW	OWS-003-04-ESW	OWS-004-05-ESW	OWS-005-08-EBT	OWS-006-08-EBT
VOCs(ug/kg)																
1,1,1-Trichloroethane	1.2E+06	--	1200000	--	1200000	--	1200000	2000	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
1,1,2,2-Tetrachloroethane	9.3E+02	--	--	--	--	--	--	--	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
1,1,2-Trichloroethane	1.6E+03	8200000	1800000	8200000	1800000	310000	1800000	20	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
1,1-Dichloroethane	1.7E+06	200000000	130000	200000000	1700000	7800000	1300000	23000	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
1,1-Dichloroethene	4.1E+05	1800000	300000	18000000	1500000	700000	1500000	60	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
1,2-Dichloroethane	6.0E+02	1400000	990	63000	700	7000	400	20	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
1,2-Dichloropropane	7.4E+02	1800000	500	84000	23000	9000	15000	30	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
2-Hexanone	--	--	--	--	--	--	--	--	24.7 U	24.4 U	25.2 U	25 U	22.9 U	24.4 U	24 U	22.7 U
Acetone	6.0E+06	200000000	100000000	200000000	100000000	7800000	100000000	16000	61.7 U	61 U	63.1 U	62.6 U	57.2 U	61.1 U	59.9 U	56.6 U
Benzene	1.3E+03	2300000	2200	100000	1600	12000	800	30	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Bromochloromethane	--	--	--	--	--	--	--	--	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Bromodichloromethane	1.8E+03	2000000	3000000	92000	3000000	10000	3000000	600	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Bromoform	2.2E+05	16000000	140000	720000	100000	81000	53000	800	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Bromomethane	1.3E+04	1000000	3900	2900000	15000	110000	10000	200	12.3 U	12.2 U	12.6 U	12.5 U	11.4 U	12.2 U	12 U	11.3 U
Carbon disulfide	7.2E+05	20000000	9000	200000000	720000	7800000	720000	32000	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Carbon tetrachloride	5.5E+02	410000	900	44000	640	5000	300	70	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Chlorobenzene	5.3E+05	4100000	1300	41000000	210000	1600000	130000	1000	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Chloroethane	6.5E+03	--	--	--	--	--	--	--	12.3 U	12.2 U	12.6 U	12.5 U	11.4 U	12.2 U	12 U	11.3 U
Chloroform	1.2E+04	2000000	760	940000	540	100000	300	600	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Chloromethane	2.6E+03	--	--	--	--	--	--	--	12.3 U	12.2 U	12.6 U	12.5 U	11.4 U	12.2 U	12 U	11.3 U
cis-1,2-Dichloroethene	1.5E+05	20000000	1200000	20000000	1200000	780000	1200000	400	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
cis-1,3-Dichloropropene	--	--	--	--	--	--	--	--	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Dibromochloromethane	2.6E+03	41000000	1300000	41000000	1300000	1600000	1300000	400	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Ethylbenzene	2.0E+04	20000000	58000	200000000	400000	7800000	400000	13000	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Ethylene Glycol	1.0E+08	--	--	--	--	--	--	--			12600 U	12500 U	11400 U	12200 U	12000 U	11300 U
m,p-Xylene (Sum Of Isomers)	4.2E+05	--	--	--	--	--	--	--	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Methylene chloride	2.1E+04	12000000	34000	760000	24000	85000	13000	20	6.2 U	6.1 U	5.3 U	6.3 U	5.6 U	8.2 U	6 U	4.8 U
o-Xylene (1,2-Dimethylbenzene)	--	410000000	410000	1000000000	410000	160000000	410000	190000	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Styrene	1.7E+06	41000000	430000	410000000	1500000	16000000	1500000	4000	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Tetrachloroethene(PCE)	3.4E+03	2400000	28000	110000	20000	12000	11000	60	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
trans-1,2-Dichloroethene	2.3E+05	41000000	3100000	41000000	3100000	1600000	3100000	700	6.2 UJ	6.1 UJ	6.3 UJ	6.3 UJ	5.7 UJ	6.1 UJ	6 UJ	5.7 UJ
trans-1,3-Dichloropropene	--	--	--	--	--	--	--	--	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Trichloroethene (TCE)	1.1E+02	1200000	12000	520000	8900	58000	5000	60	6.2 U	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Vinyl chloride	7.5E+02	170000	1100	7900	1100	460	200	10	12.3 U	12.2 U	12.6 U	12.5 U	11.4 U	12.2 U	12 U	11.3 U
Toluene	5.2E+05	410000000	42000	410000000	650000	16000000	650000	12000	6.2 U	6.1 U	0.52 J	6.3 U	5.7 U	6.1 U	6 U	5.7 U

Table 1
Analytical Data Summary
Fort Dearborn, USARC, Chicago, IL
Various Sites Remediations

Parameter	Region 9 Industrial PRG	TACO Tier 1 Soil Remediation Objectives							Soil Sample Analytical Results							
		CWING	CWINH	ICING	ICINH	RESING	RESINH	SC1GW	FSS-005-08-EBT	FSS-006-05-EBT	OWS-001-05-ESW	OWS-002-05-ESW	OWS-003-04-ESW	OWS-004-05-ESW	OWS-005-08-EBT	OWS-006-08-EBT
PAHs(ug/kg)																
Acenaphthene	2.9E+07	120000000	--	120000000	--	4700000	--	570000	12.3 U	11.4 J	12.6 U	12.5 U	11.4 U	12.2 U	12 U	11.3 U
Acenaphthylene	--	61000000	--	61000000	--	2300000	--	15000	12.3 U	6.4 J	12.6 U	12.5 U	11.4 U	12.2 U	12 U	11.3 U
Anthracene	1.0E+08	610000000	--	610000000	--	23000000	--	12000000	12.3 U	18.2 =	10.4 J	12.5 U	11.4 U	12.2 U	12 U	11.3 U
Benzo(a)anthracene	2.1E+03	170000	--	8000	--	900	--	2000	12.3 U	32.6 =	64.7 =	21.6 =	11.4 U	12.2 U	12 U	12.1 =
Benzo(a)pyrene	2.1E+02	17000	--	800	--	90	--	8000	12.3 U	28.8 =	69.6 =	22.9 =	11.4 U	12.2 U	12 U	11.3 U
Benzo(b)fluoranthene	2.1E+03	170000	--	8000	--	900	--	5000	12.3 U	28.3 =	70 =	20.8 =	11.4 U	12.2 U	12 U	11.3 U
Benzo(g,h,i)perylene	--	61000000	--	61000000	--	2300000	--	16000000	3.1 J	22.3 =	49.1 =	16.9 =	11.4 U	12.2 U	6.6 J	8.7 J
Benzo(k)fluoranthene	2.1E+04	1700000	--	78000	--	9000	--	49000	12.3 U	24.9 =	60.2 =	24.3 =	11.4 U	12.2 U	12 U	11.3 U
Chrysene	2.1E+05	17000000	800000	780000	--	88000	--	160000	3.8 J	40.6 =	84.2 =	27.8 =	11.4 U	12.2 U	12.2 =	13.4 =
Dibenz(a,h)Anthracene	2.1E+02	17000	--	800	--	90	--	2000	12.3 U	6.7 J	12.6 U	12.5 U	11.4 U	12.2 U	12 U	11.3 U
Fluoranthene	2.2E+07	82000000	--	82000000	--	3100000	--	4300000	12.3 U	80.5 =	152 =	46.1 =	11.4 U	12.2 U	12 U	11.3 U
Fluorene	2.6E+07	82000000	--	82000000	--	3100000	--	560000	12.3 U	19.9 =	4.4 J	12.5 U	11.4 U	12.2 U	12 U	11.3 U
Indeno(1,2,3-CD)pyrene	2.1E+03	170000	--	8000	--	900	--	14000	12.3 U	18.4 =	46.4 =	15.6 =	11.4 U	12.2 U	12 U	11.3 U
Naphthalene	1.9E+05	4100000	1800	41000000	270000	1600000	170000	12000	12.3 U	12.2 U	12.6 U	12.5 U	11.4 U	12.2 U	12 U	11.3 U
Phenanthrene	--	61000000	--	61000000	--	2300000	--	140000	12.3 U	91.6 =	67.7 =	20.3 =	11.4 U	12.2 U	12 U	11.3 U
Pyrene	2.9E+07	61000000	--	61000000	--	2300000	--	4200000	2.7 J	76.4 =	136 =	44.4 =	11.4 U	12.2 U	5.6 J	5.2 J
PCBs/Pesticides (ug/kg)																
PCB-1016 (Arochlor 1016)	2.1E+04	--	--	--	--	--	--	--	40.7 U	40.2 U	41.6 U	41.3 U	37.8 U	40.3 U	39.5 U	37.4 U
PCB-1221 (Arochlor 1221)	7.4E+02	--	--	--	--	--	--	--	82.7 U	81.7 U	84.5 U	83.9 U	76.7 U	81.8 U	80.2 U	75.9 U
PCB-1232 (Arochlor 1232)	7.4E+02	--	--	--	--	--	--	--	40.7 U	40.2 U	41.6 U	41.3 U	37.8 U	40.3 U	39.5 U	37.4 U
PCB-1242 (Arochlor 1242)	7.4E+02	--	--	--	--	--	--	--	40.7 U	40.2 U	41.6 U	41.3 U	37.8 U	40.3 U	39.5 U	37.4 U
PCB-1248 (Arochlor 1248)	7.4E+02	--	--	--	--	--	--	--	40.7 U	40.2 U	41.6 U	41.3 U	37.8 U	40.3 U	39.5 U	37.4 U
PCB-1254 (Arochlor 1254)	7.4E+02	--	--	--	--	--	--	--	40.7 U	40.2 U	41.6 U	41.3 U	37.8 U	40.3 U	39.5 U	37.4 U
PCB-1260 (Arochlor 1260)	7.4E+02	--	--	--	--	--	--	--	40.7 U	40.2 U	41.6 U	41.3 U	37.8 U	40.3 U	39.5 U	37.4 U
Inorganics (mg/kg)																
Aluminum	1.0E+05	--	--	--	--	--	--	--	6440 =	10200 =	11800 =	11500 =	5220 =	9100 =	6480 =	5080 =
Antimony	4.1E+02	82	--	820	--	31	--	5	0.9 =	0.92 =	1.3 =	1.1 =	0.82 =	0.94 =	0.92 J	0.99 =
Arsenic	1.6E+00	61	25000	--	1200	13	750	31	**9.7** =	**8.1** =	**10.3** =	**8.2** =	**7.4** =	**7.7** =	**6.3** =	**9.2** =
Barium	6.7E+04	14000	870000	140000	910000	5500	690000	2100	37.8 =	82.6 =	80.9 =	99 =	28.8 =	49.6 =	33.5 =	26 =
Beryllium	1.9E+03	410	44000	4100	2100	160	1300	8000	0.25 =	0.41 =	0.7 =	0.63 =	0.32 =	0.54 =	0.37 =	0.33 =
Cadmium	4.5E+02	200	59000	2000	2800	78	1800	430	0.25 U	0.24 U	0.5 U	0.5 U	0.46 U	0.49 U	0.48 U	0.62 =
Calcium	--	--	--	--	--	--	--	--	53100 =	21900 =	11900 =	12400 =	63400 =	56800 =	62500 =	55400 =
Chromium, Total	4.5E+02	4100	690	6100	420	230	270	--	11.9 =	18.3 =	16.6 =	14.4 =	9 =	14.9 =	11.6 =	9.5 =
Cobalt	1.9E+03	12000	--	120000	--	4700	--	--	8.9 =	8.8 =	8.9 =	9.8 =	6.4 =	9.4 =	15 J	6.2 =
Copper	4.1E+04	8200	--	82000	--	2900	--	330000	41.1 =	39.1 =	29.3 =	20.2 =	20.6 =	28.3 =	22.5 =	24.3 =
Iron	1.0E+05	--	--	--	--	--	--	--	20100 =	20300 =	21800 =	17300 =	13600 =	17900 =	14000 =	17300 =
Lead	7.5E+02	400	--	400	--	400	--	--	17.2 =	43.2 =	43.3 =	15.9 =	8.8 =	10.7 =	10.6 =	11.7 =
Magnesium	--	--	--	--	--	--	--	--	34000 =	13500 =	8560 =	7230 =	38700 =	26900 =	37600 =	33700 =
Manganese	1.9E+04	9600	8700	96000	91000	3700	69000	--	437 =	404 =	459 =	518 =	445 =	343 =	676 =	359 =
Mercury	3.1E+02	61	52000	610	540000	23	10	6.4	0.099 U	0.098 U	0.1 U	0.1 U	0.092 U	0.098 U	0.096 U	0.091 U
Nickel	2.0E+04	4100	440000	41000	21000	1600	13000	3800	25.5 =	22.1 =	21.3 =	15 =	13.8 =	23.8 =	26.6 J	17.8 =
Potassium	--	--	--	--	--	--	--	--	1470 =	1400 =	1320 =	1110 =	1050 =	2010 =	1700 =	1310 =
Selenium	5.1E+03	1000	--	10000	--	390	--	2.4	0.62 U	0.61 U	0.7 =	0.63 U	0.57 U	0.61 U	0.6 U	0.57 U
Silver	5.1E+03	1000	--	10000	--	390	--	110	0.62 U	0.61 U	0.63 U	0.63 U	0.57 U	0.61 U	0.6 U	0.57 U
Sodium	--	--	--	--	--	--	--	--	65.9 =	48.8 U	101 =	85.9 =	128 =	140 =	157 =	137 =
Thallium	6.7E+01	160	--	160	--	6.3	--	3.8	0.37 U	0.37 U	0.38 U	0.38 U	0.34 U	0.37 U	0.36 U	0.34 U

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Various Sites Remediations

Parameter	Region 9 Industrial PRG	TACO Tier 1 Soil Remediation Objectives							Soil Sample Analytical Results							
		CWING	CWINH	ICING	ICINH	RESING	RESINH	SC1GW	FSS-005-08-EBT	FSS-006-05-EBT	OWS-001-05-ESW	OWS-002-05-ESW	OWS-003-04-ESW	OWS-004-05-ESW	OWS-005-08-EBT	OWS-006-08-EBT
Vanadium	7.2E+03	1400	--	14000	--	550	--	980	13.4 =	21.9 =	26.3 =	23.9 =	12.1 =	18.7 =	14 =	11.5 =
Zinc	1.0E+05	61000	--	610000	--	23000	--	53000	46.4 =	60.9 =	60.2 =	45.5 =	29.9 =	40.5 =	33.7 =	52.5 =

Notes:

	Exceeds TACO Tier 1 Soil ROs for residential ingestion pathway
Bold	Exceeds Region 9 PRGs (October 2002) for industrial soil
CWING	TACO Tier 1 Soil RO for construction worker ingestion pathway
CWINH	TACO Tier 1 Soil RO for construction worker inhalation pathway
ICING	TACO Tier 1 Soil RO for industrial/commercial worker ingestion pathway
ICINH	TACO Tier 1 Soil RO for industrial/commercial worker inhalation pathway
RESING	TACO Tier 1 Soil RO for residential ingestion pathway
RESINH	TACO Tier 1 Soil RO for residential inhalation pathway
SC1GW	TACO Tier 1 Soil RO for soil component of the groundwater ingestion pathway (Class I) Soil pH ranges 8-10. Soil component of the groundwater ingestion pathway for metals depends on the pH value. Use values at pH = 8.
U	Sample is not detected
J	Reported concentration is estimated
=	Sample is detected at the reported concentration
--	Not available

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Fort Dearborn, USARC, Chicago, IL
Various Sites Remediations

Parameter	Region 9 Industrial PRG	TACO Tier 1 Soil Remediation Objectives							Soil Sample Analytical Results							
		CWING	CWINH	ICING	ICINH	RESING	RESINH	SC1GW	VWR-001-03-EBT	VWR-001-03-ESW	VWR-002-02-ESW	VWR-003-02-ESW	VWR-004-02-ESW	VWR-005-02-EBT	VWR-006-02-EBT	VWR-007-04-EBT
SVOCs(ug/kg)																
1,2,4-Trichlorobenzene	3.0E+06	2000000	920000	20000000	3200000	780000	3200000	5000	6.3 U	6.1 U	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
1,2-Dichlorobenzene	3.7E+05	18000000	310000	180000000	560000	7000000	560000	17000	6.3 U	6.1 U	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
1,3-Dichlorobenzene	6.3E+04	--	--	--	--	--	--	--	6.3 U	6.1 U	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
1,4-Dichlorobenzene	7.9E+03	--	340000	--	17000000	--	11000000	2000	6.3 U	6.1 U	5.8 U	5.8 U	6.1 U	5.8 UJ	5.9 U	6.1 U
2,4,5-Trichlorophenol	6.2E+07	200000000	--	200000000	--	7800000	--	270000	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
2,4,6-Tribromophenol	--	--	--	--	--	--	--	--	2590 =	3560 =	2420 =	2260 =	2580 =	1540 =	1520 =	2400 =
2,4-Dichlorophenol	1.8E+06	610000	--	6100000	--	230000	--	1000	414 UJ	403 U	381 UJ	385 UJ	400 UJ	386 U	392 U	405 UJ
2,4-Dimethylphenol	1.2E+07	41000000	--	41000000	--	1600000	--	9000	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
2,4-Dinitrophenol	1.2E+06	410000	--	4100000	--	160000	--	200	414 U	403 U	381 U	385 U	400 U	386 UJ	392 UJ	405 U
2,4-Dinitrotoluene	1.2E+06	180000	--	8400	--	900	--	0.8	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
2,6-Dinitrotoluene	6.2E+05	180000	--	8400	--	900	--	0.7	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
2-Chloronaphthalene	2.3E+07	--	--	--	--	--	--	--	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
2-Chlorophenol	2.4E+05	10000000	53000000	10000000	53000000	390000	53000000	4000	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
2-Methylnaphthalene	--	61000000	--	61000000	--	2300000	--	29000	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
2-Methylphenol (O-Cresol)	3.1E+07	100000000	--	100000000	--	3900000	--	15000	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
2-Nitroaniline	1.8E+04	--	--	--	--	--	--	--	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
2-Nitrophenol	--	--	--	--	--	--	--	--	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
3,3'-Dichlorobenzidine	3.8E+03	280000	--	13000	--	1000	--	7	414 U	403 U	381 U	385 U	400 U	386 UJ	392 UJ	405 U
3-Nitroaniline	--	--	--	--	--	--	--	--	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
4,6-Dinitro-2-methylphenol	--	--	--	--	--	--	--	--	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
4-Bromophenyl Phenyl Ether	--	--	--	--	--	--	--	--	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
4-Chloro-3-methylphenol	--	--	--	--	--	--	--	--	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
4-Chlorophenyl Phenyl Ether	--	--	--	--	--	--	--	--	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
4-Methylphenol (P-Cresol)	3.1E+06	--	--	--	--	--	--	--	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
4-Nitroaniline	--	--	--	--	--	--	--	--	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
4-Nitrophenol	--	--	--	--	--	--	--	--	414 U	403 U	381 U	385 U	400 U	386 UJ	392 UJ	405 U
Benzyl Butyl Phthalate	1.0E+08	410000000	930000	410000000	930000	16000000	930000	930000	410 J	403 U	92.8 J	385 U	400 U	386 U	392 U	405 U
Bis(2-Chloroethoxy) Methane	--	--	--	--	--	--	--	--	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
Bis(2-Chloroethyl) Ether	5.5E+02	75000	660	5000	470	600	200	0.4	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
Bis(2-Chloroisopropyl) Ether	7.4E+03	--	--	--	--	--	--	--	414 U	403 U	381 U	385 U	400 U	386 UJ	392 UJ	405 U
Bis(2-Ethylhexyl) Phthalate	1.2E+05	4100000	31000000	410000	31000000	46000	31000000	3600000	414 U	403 U	381 U	69.1 J	400 U	155 J	775 =	405 U
Dibenzofuran	3.1E+06	--	--	--	--	--	--	--	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
Diethyl Phthalate	1.0E+08	1000000000	2000000	1000000000	2000000	63000000	2000000	470000	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
Dimethyl Phthalate	1.0E+08	--	--	--	--	--	--	--	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
Di-N-Butyl Phthalate	6.2E+07	200000000	2300000	200000000	2300000	7800000	2300000	2300000	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
Di-N-Octylphthalate	2.5E+07	4100000	10000000	41000000	10000000	1600000	10000000	10000000	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
Hexachlorobenzene	1.1E+03	78000	2600	4000	1800	400	1000	2000	414 U	403 U	381 U	385 U	400 U	386 UJ	392 UJ	405 U
Hexachlorobutadiene	2.2E+04	--	--	--	--	--	--	--	6.3 U	6.1 U	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Hexachlorocyclopentadiene	3.7E+06	14000000	1100	14000000	16000	550000	10000	400000	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
Hexachloroethane	1.2E+05	2000000	--	2000000	--	78000	--	500	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
Isophorone	1.8E+06	410000000	4600000	410000000	4600000	15600000	4600000	8000	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
Nitrobenzene	1.0E+05	1000000	9400	1000000	140000	39000	92000	100	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
N-Nitrosodi-N-Propylamine	2.5E+02	18000	--	800	--	90	--	0.05	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
N-Nitrosodiphenylamine	3.5E+05	25000000	--	1200000	--	130000	--	1000	414 U	403 U	381 U	385 U	400 U	386 UJ	392 UJ	405 U
Pentachlorophenol	9.0E+03	520000	--	24000	--	3000	--	30	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
Phenol	1.0E+08	120000000	--	1000000000	--	47000000	--	100000	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U

Table 1
Analytical Data Summary
Fort Dearborn, USARC, Chicago, IL
Various Sites Remediations

Parameter	Region 9 Industrial PRG	TACO Tier 1 Soil Remediation Objectives							Soil Sample Analytical Results							
		CWING	CWINH	ICING	ICINH	RESING	RESINH	SC1GW	VWR-001-03-T-EBT	VWR-001-03-ESW	VWR-002-02-ESW	VWR-003-02-ESW	VWR-004-02-ESW	VWR-005-02-EBT	VWR-006-02-EBT	VWR-007-04-EBT
VOCs(ug/kg)																
1,1,1-Trichloroethane	1.2E+06	--	1200000	--	1200000	--	1200000	2000	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
1,1,2,2-Tetrachloroethane	9.3E+02	--	--	--	--	--	--	--	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
1,1,2-Trichloroethane	1.6E+03	8200000	1800000	8200000	1800000	310000	1800000	20	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
1,1-Dichloroethane	1.7E+06	200000000	130000	200000000	1700000	7800000	1300000	23000	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
1,1-Dichloroethene	4.1E+05	1800000	300000	18000000	1500000	700000	1500000	60	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
1,2-Dichloroethane	6.0E+02	1400000	990	63000	700	7000	400	20	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
1,2-Dichloropropane	7.4E+02	1800000	500	84000	23000	9000	15000	30	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
2-Hexanone	--	--	--	--	--	--	--	--	25.1 U	24.4 R	23.1 U	23.3 U	24.2 U	23.4 U	23.8 U	24.5 U
Acetone	6.0E+06	200000000	100000000	200000000	100000000	7800000	100000000	16000	62.7 U	61.1 R	57.7 U	58.3 U	60.6 U	58.5 U	57.4 J	61.3 U
Benzene	1.3E+03	2300000	2200	100000	1600	12000	800	30	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Bromochloromethane	--	--	--	--	--	--	--	--	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Bromodichloromethane	1.8E+03	2000000	3000000	92000	3000000	10000	3000000	600	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Bromoform	2.2E+05	16000000	140000	720000	100000	81000	53000	800	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Bromomethane	1.3E+04	1000000	3900	2900000	15000	110000	10000	200	12.5 U	12.2 R	11.5 U	11.7 U	12.1 U	11.7 U	11.9 U	12.3 U
Carbon disulfide	7.2E+05	20000000	9000	200000000	720000	7800000	720000	32000	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Carbon tetrachloride	5.5E+02	410000	900	44000	640	5000	300	70	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Chlorobenzene	5.3E+05	4100000	1300	41000000	210000	1600000	130000	1000	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Chloroethane	6.5E+03	--	--	--	--	--	--	--	12.5 U	12.2 R	11.5 U	11.7 U	12.1 U	11.7 U	11.9 U	12.3 U
Chloroform	1.2E+04	2000000	760	940000	540	100000	300	600	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Chloromethane	2.6E+03	--	--	--	--	--	--	--	12.5 U	12.2 R	11.5 U	11.7 U	12.1 U	11.7 U	11.9 U	12.3 U
cis-1,2-Dichloroethene	1.5E+05	20000000	1200000	20000000	1200000	780000	1200000	400	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
cis-1,3-Dichloropropene	--	--	--	--	--	--	--	--	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Dibromochloromethane	2.6E+03	41000000	1300000	41000000	1300000	1600000	1300000	400	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Ethylbenzene	2.0E+04	20000000	58000	200000000	400000	7800000	400000	13000	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Ethylene Glycol	1.0E+08	--	--	--	--	--	--	--	12500 U	12200 R	11500 U	11700 U	12100 U	11700 U	11900 U	12300 U
m,p-Xylene (Sum Of Isomers)	4.2E+05	--	--	--	--	--	--	--	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Methylene chloride	2.1E+04	12000000	34000	760000	24000	85000	13000	20	6.3 U	6.1 R	5.8 U	6.8 U	6.1 U	6.9 U	7.9 U	6.1 U
o-Xylene (1,2-Dimethylbenzene)	--	410000000	410000	1000000000	410000	160000000	410000	190000	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Styrene	1.7E+06	41000000	430000	410000000	1500000	16000000	1500000	4000	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Tetrachloroethene(PCE)	3.4E+03	2400000	28000	110000	20000	12000	11000	60	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
trans-1,2-Dichloroethene	2.3E+05	41000000	3100000	41000000	3100000	1600000	3100000	700	6.3 UJ	6.1 R	5.8 UJ	5.8 UJ	6.1 UJ	5.8 UJ	5.9 UJ	6.1 UJ
trans-1,3-Dichloropropene	--	--	--	--	--	--	--	--	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Trichloroethene (TCE)	1.1E+02	1200000	12000	520000	8900	58000	5000	60	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Vinyl chloride	7.5E+02	170000	1100	7900	1100	460	200	10	12.5 U	12.2 R	11.5 U	11.7 U	12.1 U	11.7 U	11.9 U	12.3 U
Toluene	5.2E+05	410000000	42000	410000000	650000	16000000	650000	12000	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U

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Parameter	Region 9 Industrial PRG	TACO Tier 1 Soil Remediation Objectives							Soil Sample Analytical Results							
		CWING	CWINH	ICING	ICINH	RESING	RESINH	SC1GW	VWR-001-03-EBT	VWR-001-03-ESW	VWR-002-02-ESW	VWR-003-02-ESW	VWR-004-02-ESW	VWR-005-02-EBT	VWR-006-02-EBT	VWR-007-04-EBT
PAHs(ug/kg)																
Acenaphthene	2.9E+07	120000000	--	120000000	--	4700000	--	570000	12.5 U	12.2 U	7.5 J	11.7 U	12.1 U	11.7 U	11.9 U	12.3 U
Acenaphthylene	--	61000000	--	61000000	--	2300000	--	15000	12.5 U	12.2 U	6.7 J	11.7 U	12.1 U	11.7 U	11.9 U	12.3 U
Anthracene	1.0E+08	610000000	--	610000000	--	23000000	--	12000000	12.5 U	12.2 U	27.7 =	7.1 J	5.8 J	11.7 U	11.9 U	12.3 U
Benzo(a)anthracene	2.1E+03	170000	--	8000	--	900	--	2000	5.1 J	4.7 J	138 =	47.1 =	10.1 J	9.2 J	26.9 =	12.3 U
Benzo(a)pyrene	2.1E+02	17000	--	800	--	90	--	8000	5.4 J	12.2 U	167 =	58.8 =	10.3 J	7.5 J	27.7 =	12.3 U
Benzo(b)fluoranthene	2.1E+03	170000	--	8000	--	900	--	5000	12.5 U	12.2 U	11.5 U	72.4 =	12.1 U	9.5 J	22 =	12.3 U
Benzo(g,h,i)perylene	--	61000000	--	61000000	--	2300000	--	16000000	4.6 J	12.2 U	114 =	48.9 =	7.3 J	6.9 J	22 =	12.3 U
Benzo(k)fluoranthene	2.1E+04	1700000	--	78000	--	9000	--	49000	12.5 U	12.2 U	11.5 U	39.8 =	12.1 U	6.2 J	23.5 =	12.3 U
Chrysene	2.1E+05	17000000	800000	780000	--	88000	--	160000	6.7 J	5.2 J	190 =	66.1 =	14 =	11.3 J	33.6 =	12.3 U
Dibenz(a,h)Anthracene	2.1E+02	17000	--	800	--	90	--	2000	12.5 U	12.2 U	11.5 U	6 J	12.1 U	11.7 UJ	11.9 U	12.3 U
Fluoranthene	2.2E+07	82000000	--	82000000	--	3100000	--	4300000	11 J	8.2 J	335 =	106 =	29.5 =	15.3 =	38 =	12.3 U
Fluorene	2.6E+07	82000000	--	82000000	--	3100000	--	560000	12.5 U	12.2 U	7.8 J	11.7 U	12.1 U	11.7 U	11.9 U	12.3 U
Indeno(1,2,3-CD)pyrene	2.1E+03	170000	--	8000	--	900	--	14000	3.6 J	12.2 U	104 =	44.9 =	6.1 J	5.9 J	18.3 =	12.3 U
Naphthalene	1.9E+05	4100000	1800	41000000	270000	1600000	170000	12000	12.5 U	12.2 U	11.5 U	11.7 U	10.8 J	11.7 U	11.9 U	12.3 U
Phenanthrene	--	61000000	--	61000000	--	2300000	--	140000	5.7 J	12.2 U	146 =	40.7 =	37.8 =	8.9 J	16.7 =	12.3 U
Pyrene	2.9E+07	61000000	--	61000000	--	2300000	--	4200000	11 J	8.8 J	291 =	105 =	25 =	20.7 =	48.3 =	12.3 U
PCBs/Pesticides (ug/kg)																
PCB-1016 (Arochlor 1016)	2.1E+04	--	--	--	--	--	--	--	41.4 U	40.3 U	38.1 U	38.5 U	40 U	38.6 U	39.2 U	40.5 U
PCB-1221 (Arochlor 1221)	7.4E+02	--	--	--	--	--	--	--	84.1 U	81.9 U	77.3 U	78.2 U	81.2 U	78.4 U	79.6 U	82.2 U
PCB-1232 (Arochlor 1232)	7.4E+02	--	--	--	--	--	--	--	41.4 U	40.3 U	38.1 U	38.5 U	40 U	38.6 U	39.2 U	40.5 U
PCB-1242 (Arochlor 1242)	7.4E+02	--	--	--	--	--	--	--	41.4 U	40.3 U	38.1 U	38.5 U	40 U	38.6 U	39.2 U	40.5 U
PCB-1248 (Arochlor 1248)	7.4E+02	--	--	--	--	--	--	--	41.4 U	40.3 U	38.1 U	38.5 U	40 U	38.6 U	39.2 U	40.5 U
PCB-1254 (Arochlor 1254)	7.4E+02	--	--	--	--	--	--	--	41.4 U	40.3 U	38.1 U	38.5 U	40 U	38.6 U	39.2 U	40.5 U
PCB-1260 (Arochlor 1260)	7.4E+02	--	--	--	--	--	--	--	41.4 U	40.3 U	42 =	7.1 J	40 U	38.6 U	39.2 U	40.5 U
Inorganics (mg/kg)																
Aluminum	1.0E+05	--	--	--	--	--	--	--	15300 =	11800 =	11900 =	12000 =	12300 =	10500 =	10800 =	14900 =
Antimony	4.1E+02	82	--	820	--	31	--	5	0.83 =	1 =	2.4 J	1.3 =	0.82 =	0.87 J	0.83 =	0.94 =
Arsenic	1.6E+00	61	25000	--	1200	13	750	31	**9.3** =	**8.5** =	**9.8** =	**8.7** =	**7.6** =	**12.9** =	**7.5** =	**11.8** =
Barium	6.7E+04	14000	870000	140000	910000	5500	690000	2100	117 =	109 =	154 =	109 =	134 =	81.2 =	103 =	115 =
Beryllium	1.9E+03	410	44000	4100	2100	160	1300	8000	0.39 =	0.7 =	0.5 =	0.57 =	0.55 =	0.43 =	0.51 =	0.52 =
Cadmium	4.5E+02	200	59000	2000	2800	78	1800	430	0.25 U	0.49 U	1.4 =	0.72 =	0.24 U	0.23 U	0.24 U	0.25 U
Calcium	--	--	--	--	--	--	--	--	4000 =	2850 =	11200 =	13400 =	5070 =	22600 =	16400 =	3390 =
Chromium, Total	4.5E+02	4100	690	6100	420	230	270	--	21.8 =	14.6 =	21.7 =	20.5 =	17.6 =	17.6 =	16 =	21.2 =
Cobalt	1.9E+03	12000	--	120000	--	4700	--	--	10.7 =	10.4 =	9.2 =	9 =	9.8 =	10.5 =	8.4 =	10.6 =
Copper	4.1E+04	8200	--	82000	--	2900	--	330000	29 =	16.7 =	41.9 =	33.5 =	24.9 =	38.1 J	24.8 =	37 =
Iron	1.0E+05	--	--	--	--	--	--	--	28400 =	19300 =	21400 =	21500 =	20600 =	23900 =	18800 =	31600 =
Lead	7.5E+02	400	--	400	--	400	--	--	18.7 =	16.4 =	158 J	73.1 =	19 =	22.4 =	21.2 =	18.1 =
Magnesium	--	--	--	--	--	--	--	--	4410 =	2740 =	7180 =	9050 =	3730 =	14400 =	9370 =	4240 =
Manganese	1.9E+04	9600	8700	96000	91000	3700	69000	--	663 =	680 =	653 =	627 =	403 =	439 =	319 =	622 =
Mercury	3.1E+02	61	52000	610	540000	23	10	6.4	0.1 U	0.098 U	0.092 U	0.093 U	0.11 =	0.094 U	0.095 U	0.098 U
Nickel	2.0E+04	4100	440000	41000	21000	1600	13000	3800	26 =	13.7 =	19.6 =	23.4 =	19.6 =	28.2 =	18.6 =	30.3 =
Potassium	--	--	--	--	--	--	--	--	982 =	889 =	1690 =	1750 =	1330 =	1390 =	1260 =	1080 =
Selenium	5.1E+03	1000	--	10000	--	390	--	2.4	0.96 =	1 =	0.8 =	0.63 =	0.93 =	0.58 U	0.59 U	0.94 =
Silver	5.1E+03	1000	--	10000	--	390	--	110	0.63 U	0.61 U	0.58 U	0.58 U	0.61 U	0.58 U	0.59 U	0.61 U
Sodium	--	--	--	--	--	--	--	--	50.2 U	62.7 =	46.1 U	46.7 U	48.5 U	46.8 U	47.5 U	49.1 U
Thallium	6.7E+01	160	--	160	--	6.3	--	3.8	0.38 U	0.37 U	0.35 U	0.35 U	0.36 U	0.35 U	0.36 U	0.37 U

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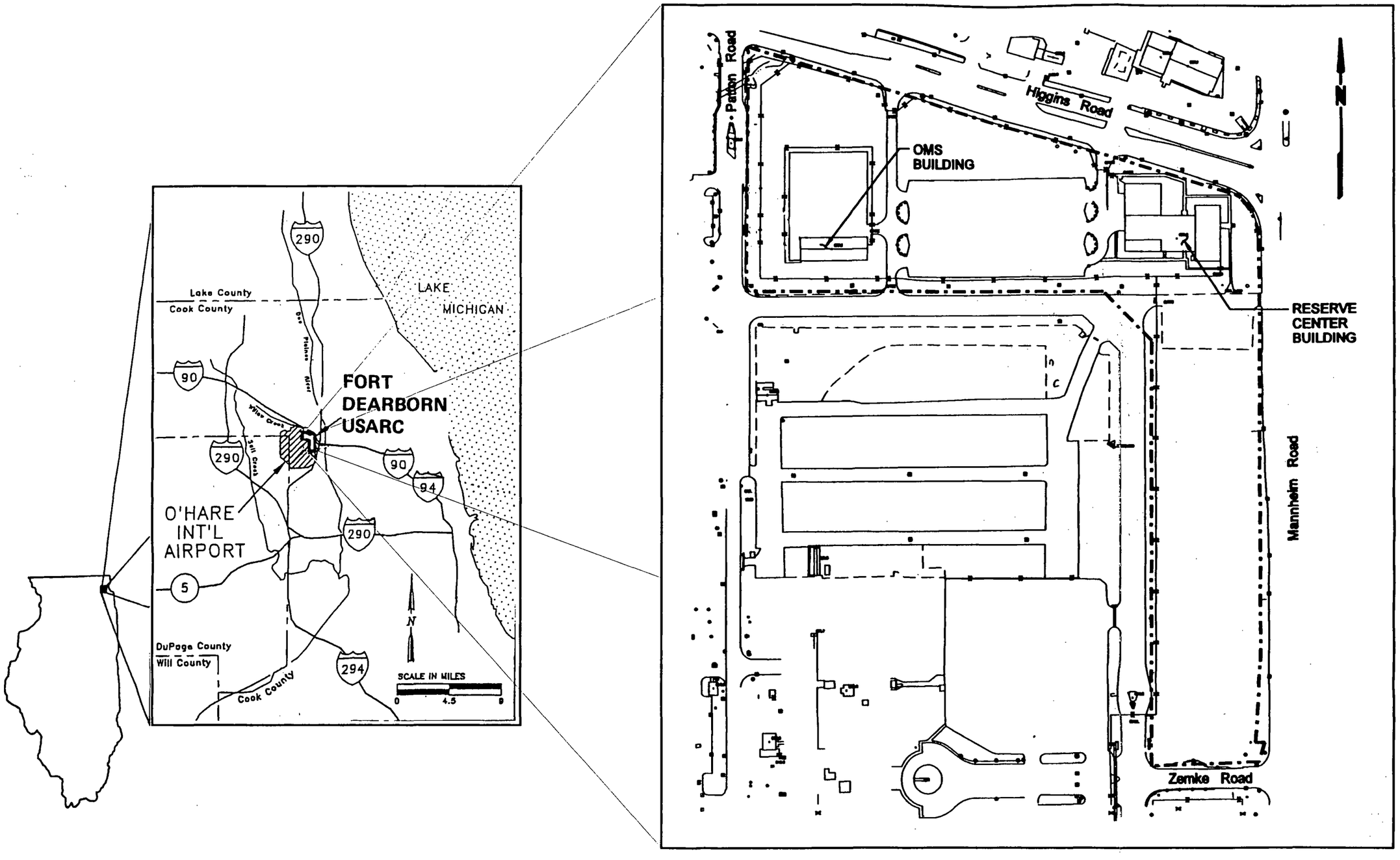
Fort Dearborn, USARC, Chicago, IL
Various Sites Remediations

		TACO Tier 1 Soil Remediation Objectives							Soil Sample Analytical Results							
Parameter	Region 9 Industrial PRG	CWING	CWINH	ICING	ICINH	RESING	RESINH	SC1GW	VWR-001-03-EBT	VWR-001-03-ESW	VWR-002-02-ESW	VWR-003-02-ESW	VWR-004-02-ESW	VWR-005-02-EBT	VWR-006-02-EBT	VWR-007-04-EBT
Vanadium	7.2E+03	1400	--	14000	--	550	--	980	35.1 =	27.1 =	26.8 =	23.5 =	26.3 =	22.1 =	24.1 =	33.3 =
Zinc	1.0E+05	61000	--	610000	--	23000	--	53000	46.4 =	41.3 =	105 =	71.9 =	48.8 =	49 =	49.1 =	58.4 =

Notes:

	Exceeds TACO Tier 1 Soil ROs for residential ingestion pathway
Bold	Exceeds Region 9 PRGs (October 2002) for industrial soil
CWING	TACO Tier 1 Soil RO for construction worker ingestion pathway
CWINH	TACO Tier 1 Soil RO for construction worker inhalation pathway
ICING	TACO Tier 1 Soil RO for industrial/commercial worker ingestion pathway
ICINH	TACO Tier 1 Soil RO for industrial/commercial worker inhalation pathway
RESING	TACO Tier 1 Soil RO for residential ingestion pathway
RESINH	TACO Tier 1 Soil RO for residential inhalation pathway
SC1GW	TACO Tier 1 Soil RO for soil component of the groundwater ingestion pathway (Class I) Soil pH ranges 8-10. Soil component of the groundwater ingestion pathway for metals depends on the pH value. Use values at pH = 8.
U	Sample is not detected
J	Reported concentration is estimated
=	Sample is detected at the reported concentration
--	Not available

FIGURES

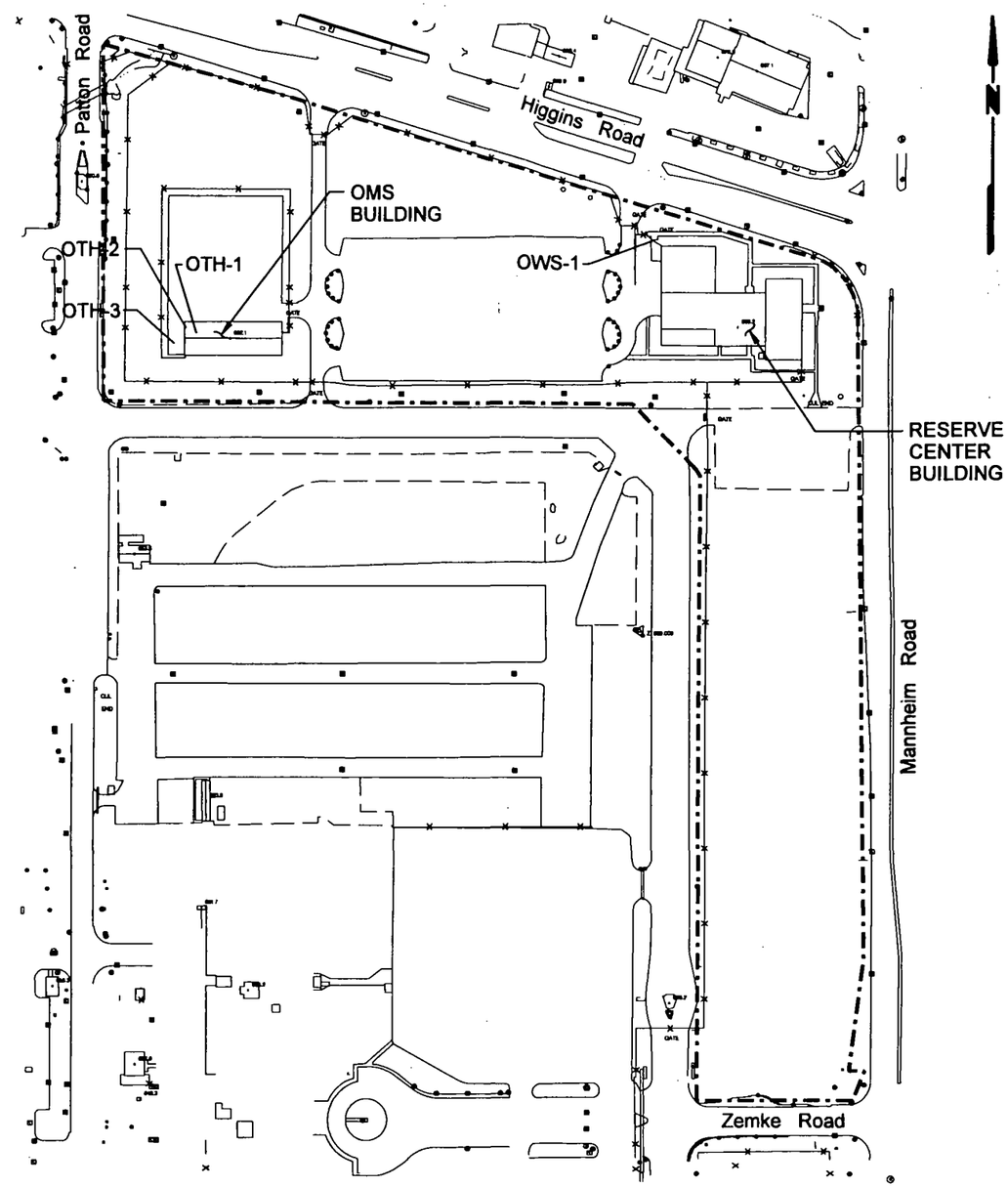


O:/chicago/fort d...orm/construction completion/figure1.cdr

MWH

Figure 1
FORT DEARBORN USARC LOCATION MAP
CONSTRUCTION COMPLETION REPORT, VARIOUS SITE REMEDIATIONS
FORT DEARBORN U.S. ARMY RESERVE CENTER
City of Chicago, Illinois

Property Categorization Factor (Site) Designation	Description
OTH-1	Former Maintenance Pit. Former pit used to facilitate maintenance activities beneath vehicles. Pit has been filed and covered with concrete.
OTH-2	Former Shop Sink. Former shop sink described as an improvised sink that drained to a 55-gallon drum that had holes punched into it and was buried in the ground, west of the OMS building. Sink has been removed but an open drain is present in the area of the former sink.
OTH-3	Former Vehicle Wash Rack. Former concrete vehicle washrack used for vehicle cleaning. The wash rack slopes to the south and drains toward a shallow ditch near the property boundary. Site is currently not in use.
OWS-1	Oil/Water Separator. Oil/water separator used to pre-treat washwater from an adjacent vehicle wash rack prior to discharge to the storm sewer system. Site is currently inactive.

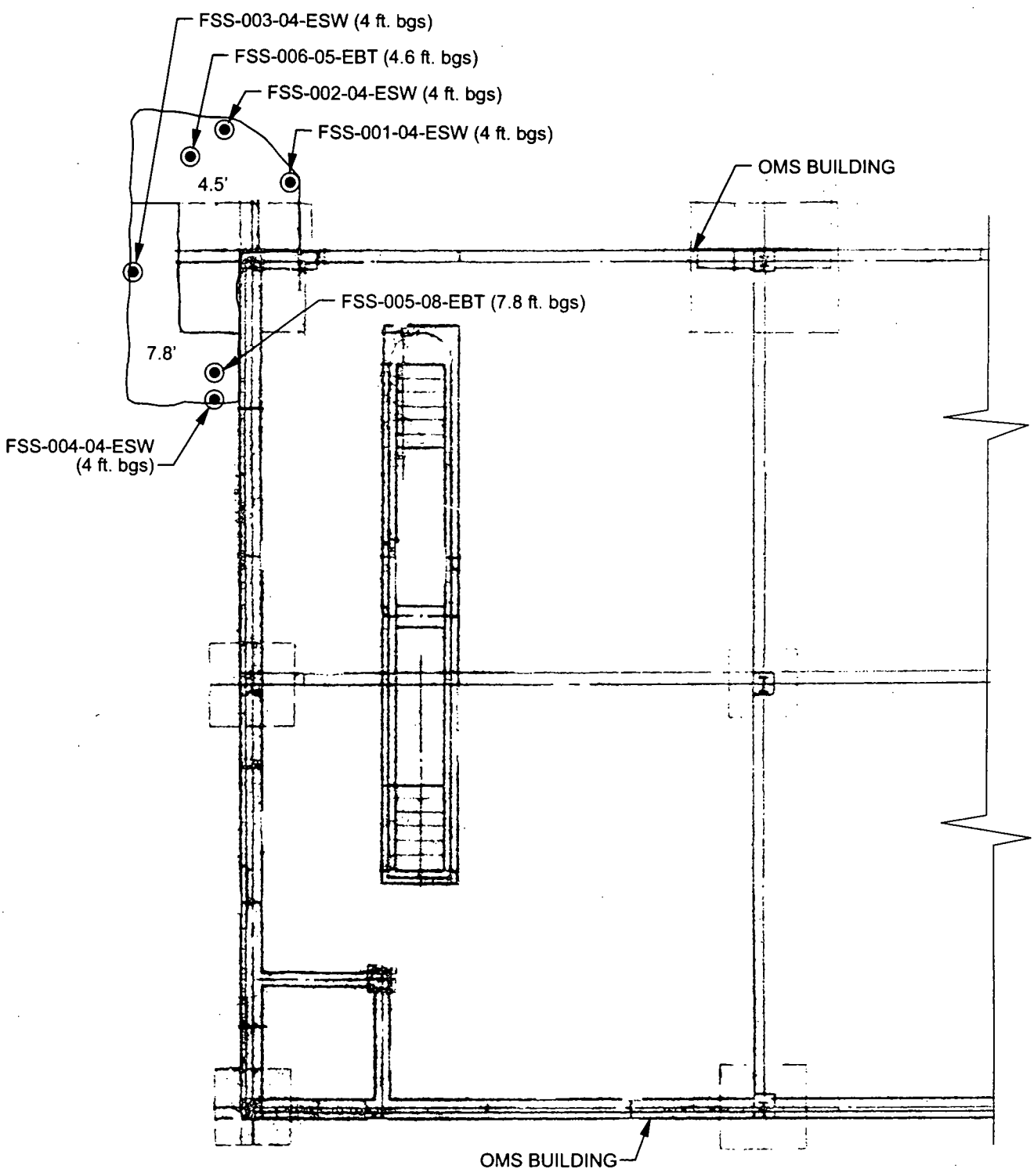


SCALE 0 200 FEET

MWH

Figure 2
WORK AREA LOCATION MAP
CONSTRUCTION COMPLETION REPORT, VARIOUS SITE REMEDIATIONS
FORT DEARBORN U.S. ARMY RESERVE CENTER
City of Chicago, Illinois

R:/5593K/400/FIGURE2.dgn



LEGEND:

- ◉ Soil Sample Location (Sample Depth)
- ~ Approximate Limits of Excavation
- 7.8' Approximate Excavation Depth

5 0 5 10

1/8"= 1'-0"

Figure 3

FORMER SHOP SINK (OTH-2)
EXCAVATION AREA AND SAMPLE LOCATIONS

CONSTRUCTION COMPLETION REPORT, VARIOUS SITE REMEDIATIONS
FORT DEARBORN U.S. ARMY RESERVE CENTER
City of Chicago, Illinois

MWH

O:\chicago\fort dearborn\Construction Completion\Figure4-Former Shop Sink.cdr.cdr

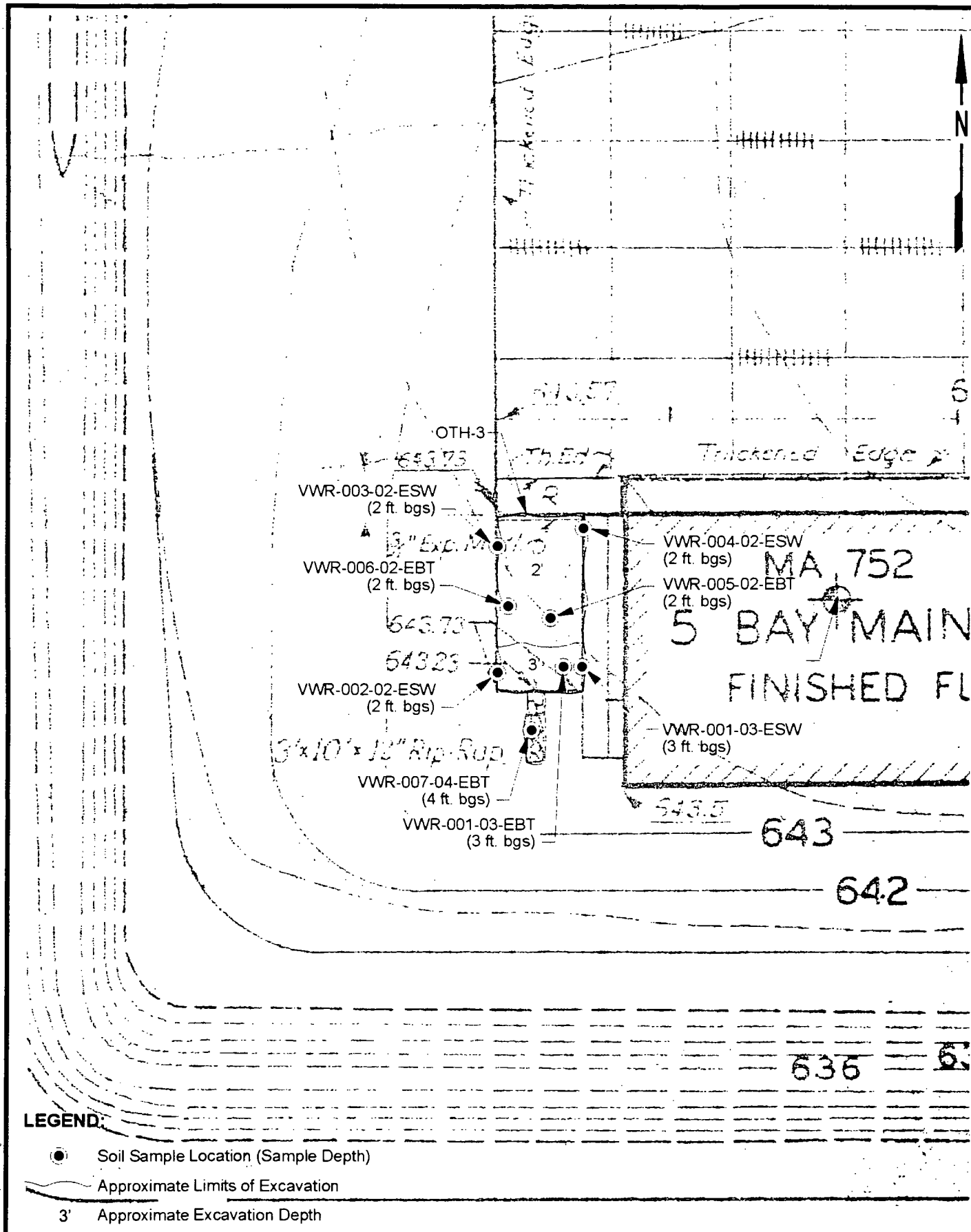


Figure 4

FORMER VEHICLE WASH RACK (OTH-3)
EXCAVATION AREA AND SAMPLE LOCATIONS

CONSTRUCTION COMPLETION REPORT, VARIOUS SITE REMEDIATIONS
FORT DEARBORN U.S. ARMY RESERVE CENTER
City of Chicago, Illinois

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O:\chicago\fort dearborn\Construction Completion\Figure 5-Former Vehicle Wash Rack-New.cdr

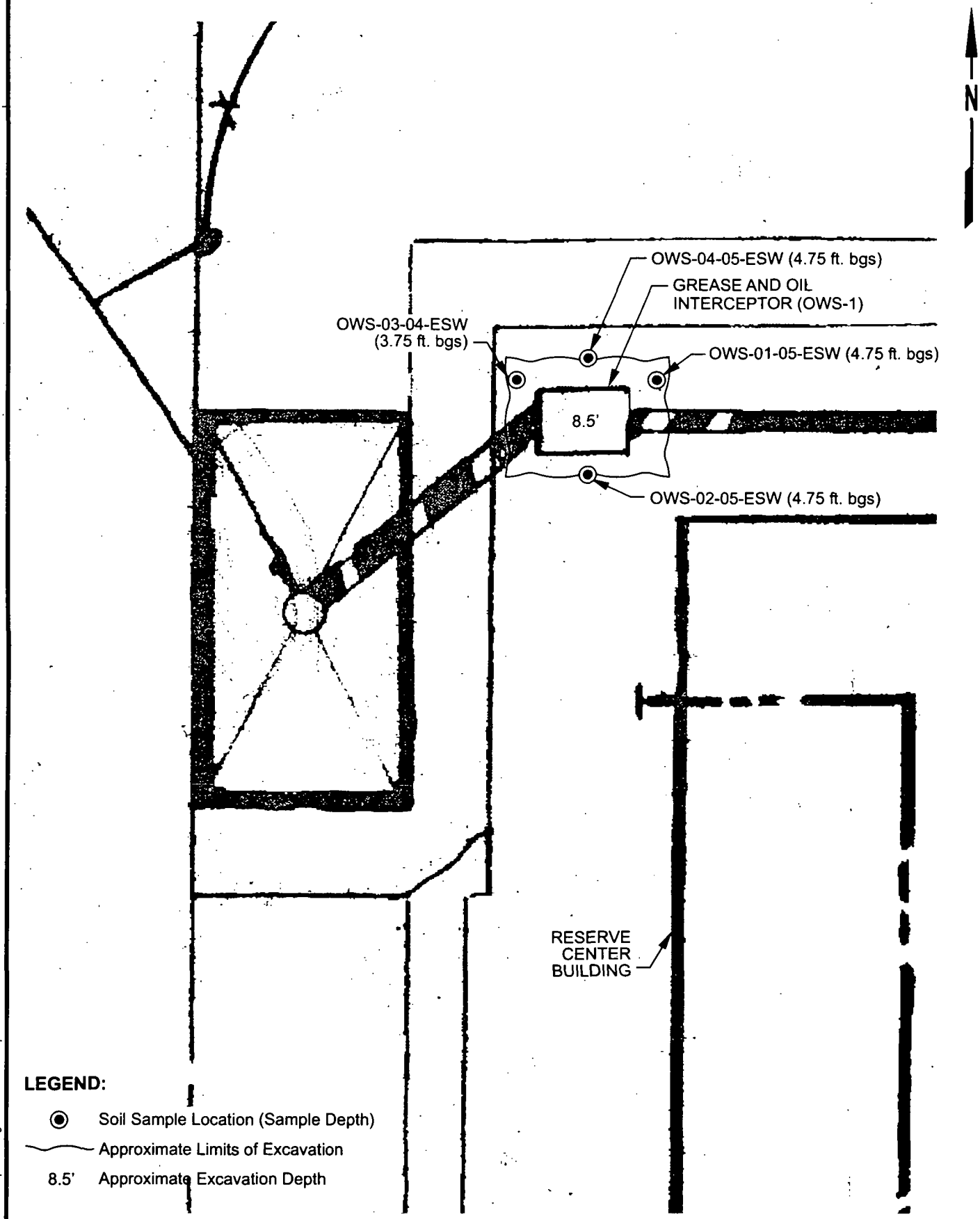

Figure 5

OIL-WATER SEPARATOR (OWS-1)
EXCAVATION AREA AND SAMPLE LOCATIONS

CONSTRUCTION COMPLETION REPORT, VARIOUS SITE REMEDIATIONS
FORT DEARBORN U.S. ARMY RESERVE CENTER
City of Chicago, Illinois

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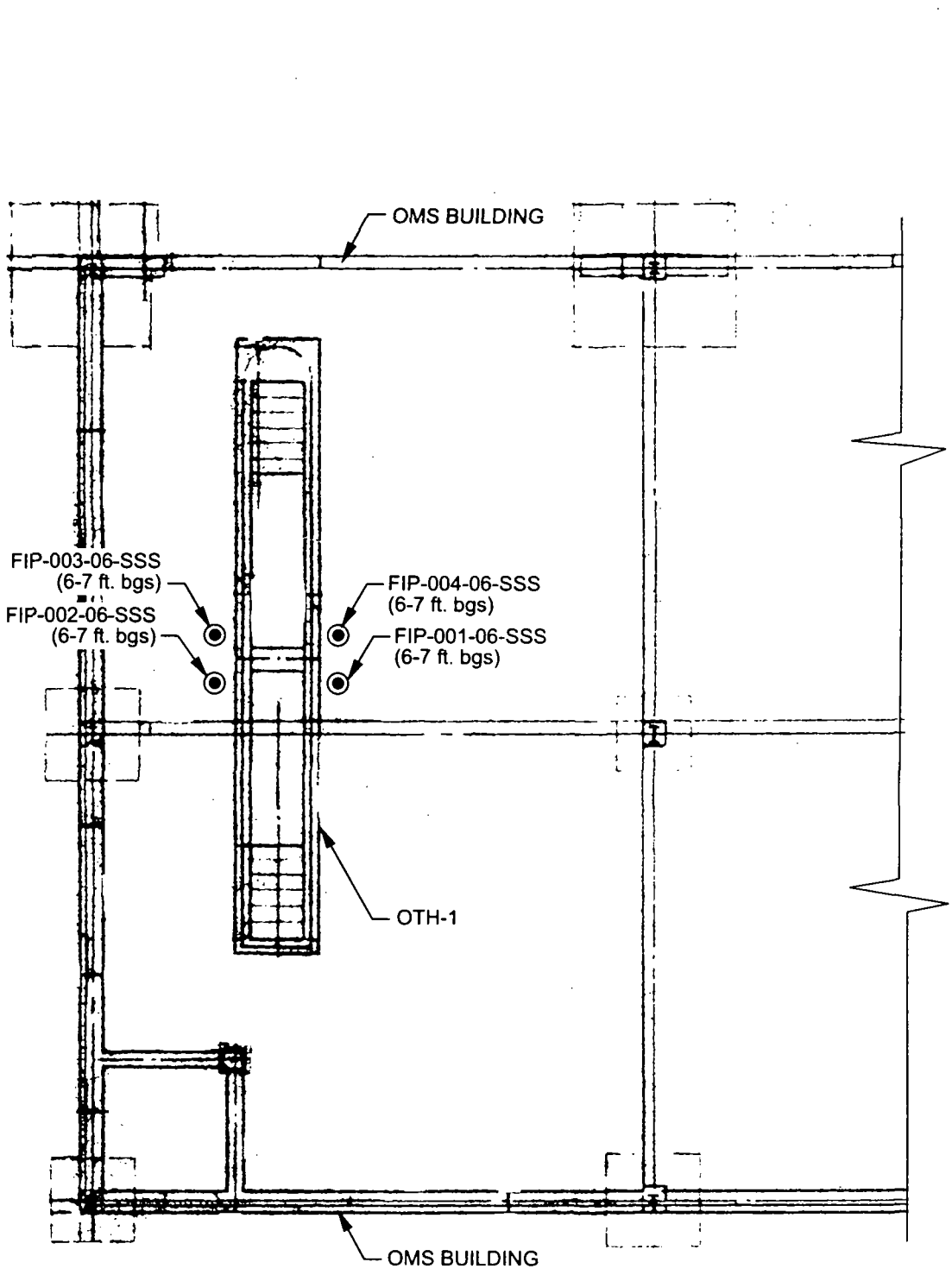
O:\chicago\fort dearborn\Construction Completion\Figure6-Oil Water Separator-1.cdr



LEGEND:

◉ Soil Sample Location (Sample Depth)

5 0 5 10

1/8"= 1'-0"

Figure 6

FORMER VEHICLE INSPECTION PIT (OTH-1)
SAMPLE LOCATIONS

CONSTRUCTION COMPLETION REPORT, VARIOUS SITE REMEDIATIONS
FORT DEARBORN U.S. ARMY RESERVE CENTER
City of Chicago, Illinois

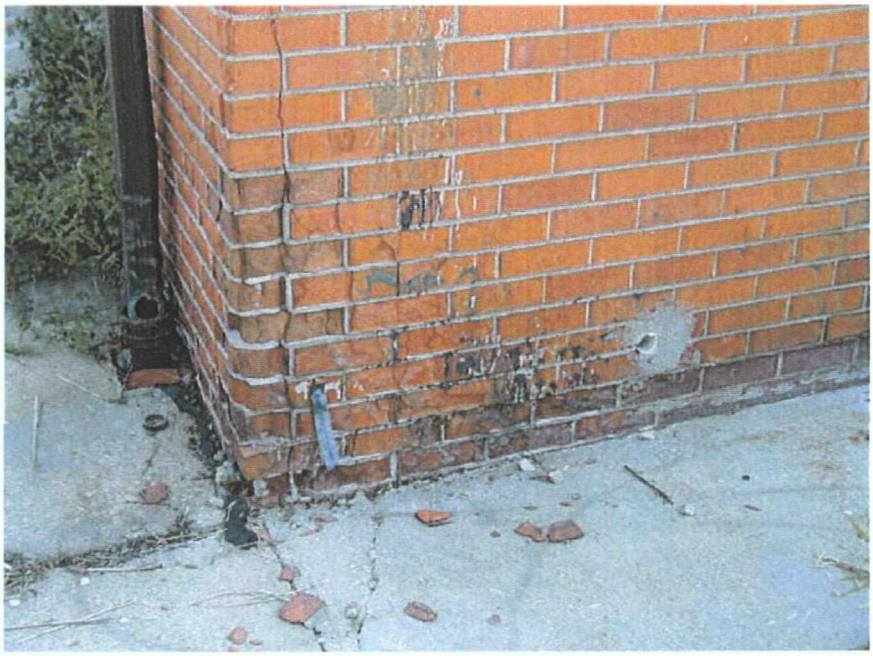
MWH

O:\chicago\fort dearborn\Construction Completion\Figure 7-Vehicle Inspection Pit.cdr

DATE: 9/10/2002

DIRECTION: Southeast

COMMENTS: Northwest corner of the OMS Building. Former Shop Sink (OTH-2) drain visible on building wall (far right of photo) and hole in downspout visible (far left of photo).



DATE: 9/11/2002

DIRECTION: South

COMMENTS: The buried 55-gallon drum can be seen after the concrete was removed at Site OTH-2, west of the OMS Building.

DATE: 9/11/2002

DIRECTION: North

COMMENTS: Four boreholes located at the Former Maintenance Pit (OTH-1).

DATE: 9/11/2002

DIRECTION: Southwest

COMMENTS: Initial removal of soil and sand from around the buried 55-gallon metal drum at the Former Shop Sink (OTH-2).

DATE: 9/11/2002

DIRECTION: East

COMMENTS: Excavation in the area of the 55-gallon drum at OTH-2 after drum removal.

DATE: 9/11/2002

DIRECTION: North

COMMENTS: Soil sample collection at Former Maintenance Pit (OTH-1).

DATE: 9/11/2002

DIRECTION: East

COMMENTS: Soil sample collection at the Former Maintenance Pit (OTH-1).

DATE: 9/12/2002

DIRECTION: North

COMMENTS: Bottom of buried 55-gallon drum removed from the Former Shop Sink (OTH-2) excavation, outside NW corner of OMS Building. Several holes are present.

DATE: 9/12/2002

DIRECTION: West

COMMENTS: Collection of samples for headspace screening at the Former Vehicle Wash Rack (OTH-3). The concrete washrack floor has been removed.

DATE: 9/12/2002

DIRECTION: South

COMMENTS: Former Vehicle Wash Rack (OTH-3) following completion of washrack floor excavation.

DATE: 9/12/2002

DIRECTION: South

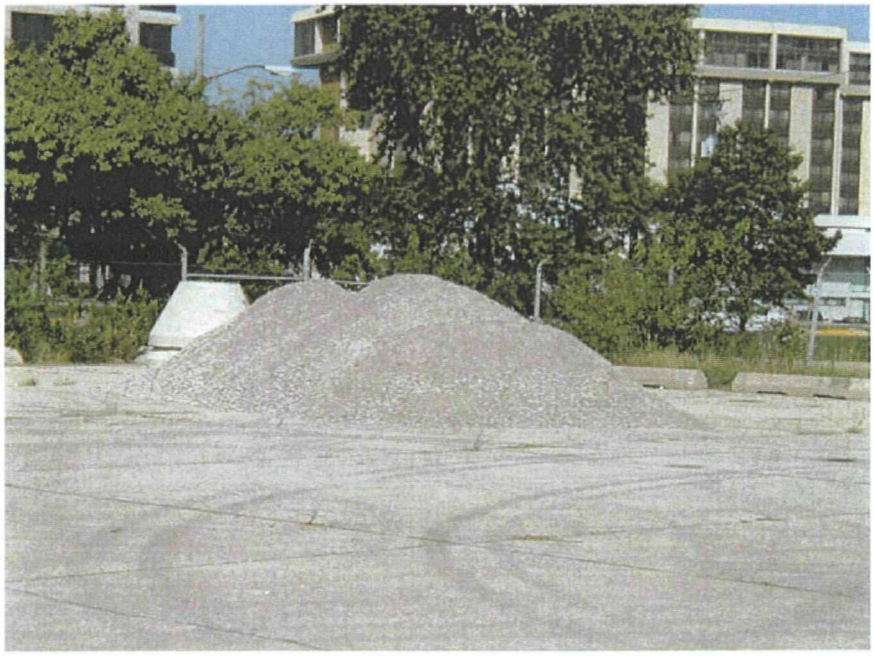
COMMENTS: Removal of soil at the Former Shop Sink (OTH-2) at the northwest corner of OMS Building. The OMS Building downspout is visible at the left side of the photograph.

DATE: 9/12/2002

DIRECTION: North

COMMENTS: View of final depth of excavation at the Former Shop Sink (OTH-2) excavation.

DATE: 9/12/2002
DIRECTION: North
COMMENTS: CA-6 crushed limestone gravel staged for backfilling and site restoration.



DATE: 9/17/2002

DIRECTION: Southwest

COMMENTS: Former Wash Rack (OTH-3) and Former Sink Shop (OTH-2) excavations after backfilling.

DATE: 9/17/2002

DIRECTION: West

COMMENTS: View of soil revealed after removal of the Oil-Water Separator (OWS-1).

DATE: 9/17/2002

DIRECTION: Southwest

COMMENTS: View of inlet pipe located on west wall of Oil- Water Separator (OWS-1) excavation.

DATE: 9/17/2002

DIRECTION: East

COMMENTS: Final depth of Oil-Water Separator (OWS-1) excavation.

DATE: 9/18/2002

DIRECTION: East

COMMENTS: Oil-Water Separator (OWS-1) site during backfilling and restoration.

DATE: 9/18/2002

DIRECTION: West

COMMENTS: View of restoration of boreholes located at the Former Maintenance Pit (OTH-1).

DATE: 9/18/2002

DIRECTION: South

COMMENTS: Former Wash Rack (OTH-3) and Former Sink Shop (OTH-2) sites after backfilling and restoration.

DATE: 9/18/2002

DIRECTION: West

COMMENTS: The 55-gallon drum and its contents removed from the Former Shop Sink (OTH-2) site excavation are shown.

B

FERGUSON·HARBOUR
INCORPORATED

ACTIVITY MEETING/INSPECTION REPORT

Contract No. DACA27-97-D-0007	Client: U.S. ARMY CORPS OF ENGINEERS
Project No. 17297	Project Name: FT DEARBORN, CHICAGO
Activity No.	Activity Name: MOBILIZATION
Activity Description: MOBILIZE TO THE PROJECT SITE FROM FERGUSON HARBOUR LOCATED IN FINDLAY, OHIO	

Date: 9 SEPT 02	Day: MONADAY	Time: 1500

Check (✓) the appropriate box below.

☑ Preparatory Meeting	☐ Initial Inspection/Meeting	☐ Follow-up Inspection/Meeting

Meeting/Inspection Attendees:	
RINEBOLT, TOM	
WHISENANT, DAVID	
EUTSLER, BRUCE	
COEN, BRETT	

Scope of Activity: DRIVE FROM FINDLAY, OHIO AND COLUMBUS, OHIO VIA U.S. INTERSTATE, PREDETERMINED, HIGHWAYS TO FT DEARBORN LOCATED IN CHICAGO, IL AT THE CORNER OF MANCHEIM + HIGGINS RD. DROP OFF SUPPLIES AND TRAILER AT THE PROJECT LOCATION THEN GO TO THE RAMADA INN PLAIN HOTEL.

Project No. 17297	Activity No.

Labor to be used:	
1-SUPERVISOR	
2-EQUIPMENT OPERATORS	
1-TECHNICIAN	

Equipment to be used:	
3-1 TON PICKUPS	
1-ER TRAILER	
1-COMPRESSOR	

Materials to be used:	
NONE	

Quality Control/Assurance Concerns:
NONE

Additional Comments/Notes (attach additional pages if required):
NONE
completed by [illegible]

FERGUSON·HARBOUR
INCORPORATED

ASSOCIATE/VISITOR SITE LOG

Page 1 of 1

Project # 17297

Date 9 SEPT 02 Day MONDAY

Project Name U.S. ACE Ft DEARBORN

Project Location CHICAGO, IL

Company Name U.S. ARMY CORPS OF ENGINEERS

Project Description MOBILIZATION - DROP OFF ER TRAILER, AIR COMPRESSOR

Customer Rep DON MANGIALARDO

DATE	NAME	SIGNATURE	COMPANY NAME	PURPOSE OF VISIT	TIME IN	TIME OUT
9-9-02	Tom Rinekoolt	TRVA	FHI	DROP OFF EQUIPMENT	1930	2030

White-Centrail File; Yellow-Project File; Pink-Customer Copy

FERGUSON HARBOUR
INCORPORATED

Page 1 of 1

Project # 17297 Date 9 SEPT 02 Day MONDAY

Project Name U.S. ACE FT DEARBORN Project Location CHICAGO, IL

Company Name U.S. ARMY CORPS OF ENGINEERS Project Description EXCAVATE, SAMPLE, BACKFILL AND DISPOSAL

Customer Rep DON MANGTALARDO

Time Started 1500 Time Completed 1530

Meeting Conducted By RINEBOLT

☐ Emergency Response ☐ Industrial ☒ Contract

Project Manager JIM FALCI

Site Health & Safety RINEBOLT

Site Supervisor RINEBOLT

#FHI Associates 4 #Subcontractors ____ #Others ____

SIGNED BY ALL IN ATTENDANCE.

1. RINEBOLT
2. Cox
3. [illegible]
4. [illegible]
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i. Daily Scope of Work: MOBILIZE TO PROJECT SITE AT FT DEARBORN LOCATED IN CHICAGO, IL

ii. Daily Chemical Hazards: NONE

Chemical	Exposure Limit	Route of Entry	Symptoms

iii. Daily Physical Hazards: TRAFFIC, PULLING TRAILERS.

iv. Accidents Reviewed: NONE

v. Comments/Suggestions: NONE

vi. Protective Levels Task

Level	PPE Description	Work Task	Type Cartridge if Level C
D	WORK CLOTHS, STEEL TOED BOOTS, SUN GLASSES (SAFETY)	ALL	—

Prepared By Tom Rinebolt Title Supervisor

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FERGUSON·HARBOUR
INCORPORATED

ACTIVITY MEETING/INSPECTION REPORT

Contract No. DACA27-97-D-007	Client: U.S. ARMY CORPS OF ENGINEERS
Project No. 17297	Project Name: U.S. ACE FT DEARBORN
Activity No. 16	Activity Name: SAMPLE OWS REMOVAL CONCRETE REPAIR
Activity Description: BREAK UP CONCRETE PAD ON WASH RACK, LOAD CONCRETE CORE OUT SAMPLE POINTS	

Date: Sept 10, 2002	Day: TUESDAY	Time: 0630

Check (✓) the appropriate box below.

[X] Preparatory Meeting	[ ] Initial Inspection/Meeting	[ ] Follow-up Inspection/Meeting

Meeting/Inspection Attendees:	
[illegible]	
[illegible]	
[illegible]	
[illegible]	
[illegible]	

Scope of Activity:

0630 - SAFETY MEETING
0700 - OPERATIONS
A - REMOVE WASH RACK CONCRETE PAD
B - LOAD CONCRETE INTO ROLL OFF BOXES PROVIDED BY SUB CONTRACTOR
C - BEGIN CORING IN WORK AREA

Project No. 17297	Activity No. 16

Labor to be used:	
DAVID WHISENANT	OPERATOR
BRUCE BUTLER	TECH
BRET COEN	OPERATOR
GREG KNIGHT	CHEMIST

Equipment to be used:	
JOHN DEER 544 RUBBER TIRE LOADER	
EXCAVATOR	
HOE RAM	
CORING DRILL	

Materials to be used:	
NA	

Quality Control/Assurance Concerns:
NA

Additional Comments/Notes (attach additional pages if required):
NONE
completed by: [illegible]

FERGUSON·HARBOUR
INCORPORATED

Project # 17297 Date 9-10-02 Day TUESDAY

Project Name USACE Ft DEARBORN Project Location CHICAGO, IL

Company Name U.S. ACE Project Description EXCAVATION, SAMPLING, BACKFILL

Customer Rep DON MANGIALARDO

Weather Temperature AM °F PM °F

TIME	DESCRIPTION OF ACTIVITIES AND EVENTS
06:30	TR, DW, BC, BG ON SITE, DO SAFETY AND OPS MEETING
	LOADER ON SITE. TR SENDS BG, DW TO GET SITE FLUIDS
	CREW OPENS BAY DOOR TO GAIN ACCESS TO GREASE PIT
	FOR SAMPLE LOCATIONS. 1st ROLL OFF ON SITE
0800	CREW BEGINS REMOVING PAD. TR CALL JF TO CONFIRM
	SAMPLING POINTS FOR GREASE PIT. EXCAVATOR WITH HAMMER
	ON SITE. CORE REP SAYS THAT WE WILL HAVE DIG AROUND
	DRAIN SPOUT TO SEE IF WE CAN TRACE DRAIN LINE.
1000	TR CALL JF AND SAYS WE WILL NEED MORE ROLL OFFS. JF
	GIVES NUMBER TO TR. 2nD ROLL OFF ON SITE TR CALL R-1
1200	CREW BREAKS FOR LUNCH
1230	CREW CONTINUES BREAKING OUT AND LOADING OUT PAD.
	JANIS FROM R1 CALL TR BACK SAYS WE WILL HAVE 2 MORE BOXES
	ON SITE WED.
1300	GREG KNIGHT ON SITE. TR GIVES HIM SAMPLING AND WORK-
	PLAN TO REVIEW.
1400	BEGIN CORING SAMPLING POINTS IN BAY.
1930	CREW DEPARTS SITE FOR THE DAY.

Prepared By RINGBOLT Customer Rep.

Site Supervisor RINGBOLT Title

Project Mgr. FACC I Date

SAFETY INSPECTION CHECKLIST FOR CONSTRUCTION EQUIPMENT U. S. Army Engineer Division, Great Lakes & Ohio River	Date of Inspection: 9-10-02
Contractor or Unit Ferguson Harbor Inc	Contract No. or Activity DACA27-97-D-007
Inspected by (Signature) [illegible]	Witness (Signature) [illegible]

CRANE/DERRICK, DRAGLINE, RUBBER TIRE TRACTOR (BACKHOES, FRONT END LOADERS), CRAWLER TRACTOR (DOZERS), DUMP TRUCK AND SIMILAR HEAVY EQUIPMENT NOTE: Safety and Health Requirements Manual (EM 385-1-1) references in parentheses.		Yes	No	N/A
1	Are the following documents with the crane at all times? (16.C.02)			
1a	Operating manual from the manufacturer for the specific crane being inspected.			
	(1) Any operator aids for which the crane is equipped?		✓	
1b	Load rating chart for the crane which shall include:		✓	
	(1) the crane make and model, serial number, and year of manufacturer Kobelco 135 Skic 122322	✓		
	(2) load ratings for all crane operating configurations: including optional equipment			✓
	(3) recommended reeving for the hoist line			✓
	(4) operating limits in windy or cold conditions		✓	
1c	Crane logbook that shows operating hours, inspections, tests, maintenance & repair. **Note:** Has log been updated daily when crane is used, and is signed by operator & supervisor? **Note:** Mechanics shall sign after conducting maintenance or repairs.			✓
2	Does operator have certification that he meets operator qualification and training as stated in 16.C.05? (Corps' crane operators must comply with Appendix G.)	✓		
3	Is there a hazard analysis for set-up and set-down procedures (mobilization, assembly, dismantling, etc.)? (16.C.08)		✓	
4	Are adequate clearances provided from electrical sources, fixed objects, and swing radius? (16.C.09)	✓		
5	Are communications provided as required? (16.C.11)	✓		
6	Has an inspection been performed in accordance with 16.C.12 and Appendix H?	✓		
7	Have performance load tests been conducted in accordance with 16.C.13?			✓
8	Are tag lines used to control loads? (16.C.16)		✓	
9	Is a critical lift plan required? (16.C.18 and page 293)		✓	
10	Are all environmental considerations of 16.C.19 being met?	✓		
11	Is the crane equipped with a boom angle indicator, load-indicating device, means to visually determine levelness, and anti-two block devices? (16.D.01)			✓
12	Are cable-supported booms equipped with boom stops? (16.D.06)		✓	

	SAFETY INSPECTION CHECKLIST FOR CONSTRUCTION EQUIPMENT	Yes	No	N/A
13	Do all floating cranes and derricks meet the requirements of 16.F?			✓
14	Are all moving parts (gears, drums, shafts, belts, etc.) and all hot surfaces (exhaust lines, pipes, etc.) guarded? (16.B.03)	✓		
15	Is protection (grills, canopies, screens) provided to shield operator from falling or flying objects? (16.B.10 and 16.B.11)	✓		
16	Is adequate rollover protection provided? (16.B.12)	✓		
17	Are seat belts provided? (16.B.08)	✓		
18	Does the unit have a suitable fire extinguisher? Min. 5 BC (16.A.26)		✓	
19	Is there an effective and operational reverse alarm? (16.B.01)		✓	
20	Is a safe means of access to the cab provided (steps, grab bars, non-slip surfaces)? (16.B.03 (d))	✓		
21	Are pressurized cylinders, outriggers, etc., equipped with a pilot check valve? (20.A.17)		✓	
22	Are sufficient lights provided for night operators? (16.A.11)		✓	
23	Are daily, initial inspections, and tests (prior to each shift) of the equipment performed by a designated competent person? (16.A.01 & 16.A.02)	✓		
24	Are fuel tanks located in a manner to prevent spills or overflows from running onto engine exhaust or electrical equipment? (16.B.04)	✓		
25	Are exhaust discharges from equipment so directed that they do not endanger persons or obstruct the view of the operator? (16.B.05)	✓		
26	Are inspection records kept available as a part of the official project file? (16.A.01 (b))			
27	Do all motor vehicles meet the requirements of 18.A and 18.B?			
	Remarks:			
	NOTE: It is not anticipated that this checklist will be used for conveyors, concrete plants, material hoists, elevators air compressors and other special purpose construction equipment not mentioned on page 1 of this form.			

SAFETY INSPECTION CHECKLIST FOR CONSTRUCTION EQUIPMENT U. S. Army Engineer Division, Great Lakes & Ohio River	Date of Inspection 9/10/02 DACA 27-99-D-007
Contractor or Unit Ferguson Harbour	Contract No. or Activity
Inspected by (Signature) [illegible]	Witness (Signature) [illegible]

CRANE/DERRICK, DRAGLINE, RUBBER TIRE TRACTOR (BACKHOES, FRONT END LOADERS), CRAWLER TRACTOR (DOZERS), DUMP TRUCK AND SIMILAR HEAVY EQUIPMENT NOTE: Safety and Health Requirements Manual (EM 385-1-1) references in parentheses.		Yes	No	N/A
1	Are the following documents with the crane at all times? (16.C.02)			
1a	Operating manual from the manufacturer for the specific crane being inspected.	✓		
	(1) Any operator aids for which the crane is equipped?			✓
1b	Load rating chart for the crane which shall include:			✓
	(1) the crane make and model, serial number, and year of manufacturer 544H 3672RD Johndeere	✓		
	(2) load ratings for all crane operating configurations: including optional equipment	✓		
	(3) recommended reeving for the hoist line			✓
	(4) operating limits in windy or cold conditions			✓
1c	Crane logbook that shows operating hours, inspections, tests, maintenance & repair. **Note:** Has log been updated daily when crane is used, and is signed by operator & supervisor? **Note:** Mechanics shall sign after conducting maintenance or repairs.			✓
2	Does operator have certification that he meets operator qualification and training as stated in 16.C.05? (Corps' crane operators must comply with Appendix G.)	✓		
3	Is there a hazard analysis for set-up and set-down procedures (mobilization, assembly, dismantling, etc.)? (16.C.08)			✓
4	Are adequate clearances provided from electrical sources, fixed objects, and swing radius? (16.C.09)	✓		
5	Are communications provided as required? (16.C.11)	✓		
6	Has an inspection been performed in accordance with 16.C.12 and Appendix H?	✓		
7	Have performance load tests been conducted in accordance with 16.C.13?			✓
8	Are tag lines used to control loads? (16.C.16)			✓
9	Is a critical lift plan required? (16.C.18 and page 293)			✓
10	Are all environmental considerations of 16.C.19 being met?		✓	
11	Is the crane equipped with a boom angle indicator, load-indicating device, means to visually determine levelness, and anti-two block devices? (16.D.01)			✓
12	Are cable-supported booms equipped with boom stops? (16.D.06)			✓

	SAFETY INSPECTION CHECKLIST FOR CONSTRUCTION EQUIPMENT	Yes	No	N/A
13	Do all floating cranes and derricks meet the requirements of 16.F?			✓
14	Are all moving parts (gears, drums, shafts, belts, etc.) and all hot surfaces (exhaust lines, pipes, etc.) guarded? (16.B.03)	✓		
15	Is protection (grills, canopies, screens) provided to shield operator from falling or flying objects? (16.B.10 and 16.B.11)	✓		
16	Is adequate rollover protection provided? (16.B.12)	✓		
17	Are seat belts provided? (16.B.08)	✓		
18	Does the unit have a suitable fire extinguisher? Min. 5 BC (16.A.26)		✓	
19	Is there an effective and operational reverse alarm? (16.B.01)	✓		
20	Is a safe means of access to the cab provided (steps, grab bars, non-slip surfaces)? (16.B.03 (d))	✓		
21	Are pressurized cylinders, outriggers, etc., equipped with a pilot check valve? (20.A.17)			✓
22	Are sufficient lights provided for night operators? (16.A.11)	✓		
23	Are daily, initial inspections, and tests (prior to each shift) of the equipment performed by a designated competent person? (16.A.01 & 16.A.02)	✓		
4	Are fuel tanks located in a manner to prevent spills or overflows from running onto engine exhaust or electrical equipment? (16.B.04)	✓		
25	Are exhaust discharges from equipment so directed that they do not endanger persons or obstruct the view of the operator? (16.B.05)	✓		
26	Are inspection records kept available as a part of the official project file? (16.A.01 (b))	✓		
27	Do all motor vehicles meet the requirements of 18.A and 18.B?			
	Remarks:			
	NOTE: It is not anticipated that this checklist will be used for conveyors, concrete plants, material hoists, elevators air compressors and other special purpose construction equipment not mentioned on page 1 of this form.			

FERGUSON·HARBOUR
INCORPORATED

ASSOCIATE/VISITOR SITE LOG

Project # 17297
Date Sept 10, 2002 Day Tuesday
Project Name USACE FT Dearborn
Project Location Chicago, Il
Company Name USACE
Project Description SAMPLING, OWS Removal
Customer Rep Don Mangialardo
Soil Removal

DATE	NAME	SIGNATURE	COMPANY NAME	PURPOSE OF VISIT	TIME IN	TIME OUT
9-10-02	David Whisenant	D Whisenant	FHI	Work	0630	1900
9-10-02	BRENT COEN	Brent	FHI	WORK	0630	1900
9-10-02	BRUCE EUTSLER	Bruce Eutsler	FHI	WORK	0630	1900
9-10-02	Tom Rinetoolt	T Rinetoolt	FHI	Work	0630	1900
9/10/02	GREG KNIGHT	Gregory A. Knight	FHI	WORK	1000	1900
9/10/02	DON MANGIALARDO	D Mangialardo	COE	QA	8:30	
9/10/02	Rebecca OSWALD	R Oswald	IEPA	oversite	9:15	

White-Centrail File; Yellow-Project File; Pink-Customer Copy

FERGUSON HARBOUR INCORPORATED

DAILY SAFETY MEETING

Project # _____ Date Sept 10, 2002 Day Tuesday

Project Name USACE Ft Dearborn Project Location Chicago, Il

Company Name USACE Project Description Gas Removal, Sampling, Soil Removal

Customer Rep Don Mangiaterdo

Time Started 0630 Time Completed 0700

Meeting Conducted By RINEBOLT

☐ Emergency Response ☐ Industrial ☒ Contract

Project Manager FACLI

Site Health & Safety RINEBOLT

Site Supervisor RINEBOLT

#FHI Associates 4 #Subcontractors _____ #Others _____

SIGNED BY ALL IN ATTENDANCE.

1. [signature]
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3. [signature]
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i. Daily Scope of Work: CORE SAMPLE POINTS, REMOVE CONCRETE PAD

ii. Daily Chemical Hazards

Chemical	Exposure Limit	Route of Entry	Symptoms
Possible Solvents			

iii. Daily Physical Hazards: Slips, Trips, Falls, Heat Stress, Strains From Lifting

iv. Accidents Reviewed: None

v. Comments/Suggestions: None

vi. Protective Levels Task

Level	PPE Description	Work Task	Type Cartridge if Level C
D	Hard Hat, Safety Glasses	All	N/A
	Steel Toed Boots, Gloves		

Prepared By Rinebolt Title RM

White-Central File Yellow-Project File, Pink-Customer Copy

Project No. 17297	Activity No.

Labor to be used:	
Chemist	
2-OPERATORS	
1-Tech	

Equipment to be used:	
Loader	
excavator	

Materials to be used:	
C-AG Backfill	

Quality Control/Assurance Concerns: NONE

Additional Comments/Notes (attach additional pages if required):

Completed by: T. Roth

FERGUSON·HARBOUR
INCORPORATED

Project # 17297 Date 9-11-02 Day WED

Project Name U.S. ACE Ft DEARBORN Project Location CHICAGO, IL

Company Name U.S. ACE Project Description SAMPLE CORING, PAD REMOVAL - EXCAVATE SOIL

Customer Rep DON MANGIALARDO

Weather Temperature AM °F PM °F

TIME	DESCRIPTION OF ACTIVITIES AND EVENTS
0630	SAFETY AND OPS MEETING, TR DISCUSSES IMPORTANCE AND
	UPGRADED SECURITY BECAUSE OF 9/11
0700	CREW CONTINUES CORING SAMPLE LOCATIONS IN GARAGE BAY
1000	CORINGS ARE COMPLETE ISPA AND ARMY CORE CHEMIST ON SITE
	BEGIN DISCUSSING SAMPLING PLAN. GK AND CORE SA CHEMIST GOING
	OVER AMOUNT OF SAMPLES TO BE TAKEN AT EACH LOCATION. TR TELLS
	CREW TO AUGER DOWN 1 FT ABOVE WERE SAMPLES ARE TO BE TAKEN
	UNTIL USACE FIGURES OUT SAMPLING PLAN.
1200	CREW BREAKS FOR LUNCH
1230	DW + BC BEGIN EXCAVATING FOR DRUM. FOUND DRUM
	RIGHT BELOW CONCRETE PAD DIRECTLY BELOW WHERE THE
	DRAIN CAME OUT ON THE OUTSIDE OF THE BUILDING. CREW
	PULLS DRUM AND PLACES IN OVER PACK.
1500	BEGIN SAMPLING CORINGS IN BAY - SAMPLING IS
	TAKING AN EXTREME LONG PERIOD OF TIME. DUE TO
	USACE BEING CONFUSED ABOUT SAMPLING PLAN
	TR SEND BC + DW TO PUMP OUT DWS.
1830	2 CORE POINTS SAMPLED. TR CONTACTS LABS ABOUT INCOMING
	SAMPLES.
1930	BC + DW TAKE SAMPLE TO FED-X - CREW DEPARTS SITE
	~~CREW~~ FOR THE DAY
2000	DW CALL TR AND SAY THAT OUR FED-X ACCOUNT IS
	NO GOOD - TR PAYS FOR SHIPMENT OVER THE PHONE.

Prepared By RINEBOLT Customer Rep.

Site Supervisor RINEBOLT Title

Project Mgr. FACCI Date

FERGUSON·HARBOUR
INCORPORATED

ASSOCIATE/VISITOR SITE LOG

Project # 17297
Date Sept 11 '08 Day Wed
Project Name USACE Ft DEARBORN
Project Location Chicago, Il
Company Name USACE
Project Description SAMPLE, CORING, CONCRETE REMOVAL
Customer Rep DON MANGIALARDO

DATE	NAME	SIGNATURE	COMPANY NAME	PURPOSE OF VISIT	TIME IN	TIME OUT
9/11	Tom Rinebott	[signature]	FHI	WORK	0650	1930
9/11	David Whisenant	[signature]	FHI	Work	0650	1930
9/11	GREG KNIGHT	Gregory C. Knight	FHI	WORK	0650	1930
9/11	BRUCE EUBLER	[signature]	FHI	WORK	0650	1930
9/11	BRENT COEN	[signature]	FHI	WORK	0650	1930
9/11	Don MANGIALARDO	D Mangialardo	COE	QA	7:00	
9/11	Rebecca Oswald	R.S. Oswald	ISPA	oversite	9:15	1600
9/11	Kathy Krantz	[signature]	COE Louisville District	oversite	9:15	1930

White-Centrail File; Yellow-Project File; Pink-Customer Copy

FERGUSON·HARBOUR
INCORPORATED

ACTIVITY MEETING/INSPECTION REPORT

Contract No. DACA 27-97-D-007	Client: U.S. ARMY CORPS OF ENGINEERS
Project No. 17297	Project Name: U.S. ACE AT DEARBORN
Activity No. 16	Activity Name: SAMPLE, OWS REMOVAL, DRUM EXCAVATION
Activity Description: LOAD OUT CONCRETE PAD FROM WASH RACK, FIND AND REMOVE BURIED DRUM, SAMPLE CORE POINTS AT GREASE PIT, PUMP OWS	

Date: Sept 11, 2002	Day: WED	Time: 2:30

Check (✓) the appropriate box below.

☑ Preparatory Meeting	☐ Initial Inspection/Meeting	☐ Follow-up Inspection/Meeting

Meeting/Inspection Attendees:	
[illegible]	
GREG KNIGHT	
BRENT COEN	
David Whisenant	
[illegible]	

Scope of Activity:

A - LOAD OUT CONCRETE PAD FROM WASH RACK

B - EXCAVATE TO LOCATE BURIED DRUM

C - COMPLETE CORING OF SAMPLE POINTS AROUND GREASE PIT

D - PUMP OUT WATER IN OWS

E - SAMPLE CORE POINTS AT GREASE PIT

FERGUSON HARBOUR
INCORPORATED

DAILY SAFETY MEETING

Page ___ of 1

Project # _____ Date Sept 11, 02 Day Wed

Project Name USACE Ft Drawbar Project Location Chicago, IL

Company Name USACE Project Description SAMPLE, CONCRETE REMOVAL

Customer Rep _____ OWS REMOVAL

Time Started 2:30 Time Completed 3:00

Meeting Conducted By RINEBOLT

☐ Emergency Response ☐ Industrial ☒ Contract

Project Manager FECI

Site Health & Safety RINEBOLT

Site Supervisor RINEBOLT

#FHI Associates 5 #Subcontractors _____ #Others _____

SIGNED BY ALL IN ATTENDANCE.

1. [signature]
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I. Daily Scope of Work: CORING, SAMPLING LOADING OUT CONCRETE, PUMP OUT OWS

II. Daily Chemical Hazards: NA

Chemical	Exposure Limit	Route of Entry	Symptoms

III. Daily Physical Hazards: NA

IV. Accidents Reviewed: NA

V. Comments/Suggestions: NA

VI. Protective Levels Task

Level	PPE Description	Work Task	Type Cartridge if Level C
D	HARD HAT, SAFETY GLASSES STEEL TOED BOOTS	ALL	NA

Prepared By Rinebolt Title RM

White-Central File Yellow-Project File, Pink-Customer Copy

FERGUSON·HARBOUR
INCORPORATED

ACTIVITY MEETING/INSPECTION REPORT

Contract No. DACA 27-97-D-007	Client: U.S. ARMY CORPS OF ENGINEERS
Project No. 17297	Project Name: U.S. ACE FT DEARBORN
Activity No. 16	Activity Name: SAMPLE OWS REMOVAL D
Activity Description: EXCAVATE SLUDGE/DRUM AREA, CONTINUE SAMPLE WASH PAD PUMP OWS	

Date: SEPT 12, 2002	Day: THURS	Time: 0630

Check (✓) the appropriate box below.

☒ Preparatory Meeting	☐ Initial Inspection/Meeting	☐ Follow-up Inspection/Meeting

Meeting/Inspection Attendees:	
[illegible]	
[illegible]	
[illegible]	

Scope of Activity:

A LOAD OUT ADDITIONAL SOIL FROM WASH RACK

B COMPLETE SAMPLING OFF WASH RACK

C EXCAVATE DRUM AREA

D FIND PIPE DRAIN DIRECTION

E BEGIN SAMPLING DRUM EXCAVATION AREA

Project No. 17297	Activity No. 16

Labor to be used:	
Chemist	
2-OPERATORS	
1-Tech	

Equipment to be used:	
LOADER	
EXCAVATOR	
ROLL OFFS	

Materials to be used:	
C-AB BACKFILL	

Quality Control/Assurance Concerns: NONE

Additional Comments/Notes (attach additional pages if required): Many ans

REMOVAL TO TUES SEPT 17, 2002

completed by [illegible]

FERGUSON·HARBOUR
INCORPORATED

Project # 17297 Date 9-12-02 Day THURSDAY

Project Name USACE Ft DEARBORN Project Location CHICAGO, IL

Company Name USACE Project Description SAMPLE, CORING SOIL REMOVAL

Customer Rep DON MANGIALARDO

Weather Temperature AM °F PM °F

TIME	DESCRIPTION OF ACTIVITIES AND EVENTS
0630	SAFET AND OPTS MEETING
0700	CREW CONTINUES SAMPLING CORINGS IN BUILDING
	DW BEGINS EXCAVATING SOIL FROM WASH RACK.
1000	DW BEGINS EXCAVATING DRUM AREA. USACE WANTS US TO EXCAVATE
	DOWN SIX FEET OR UNTIL CLEAN AND ALSO TO CHASE PIPING FROM
	DOWN SPOUT.
1100	DW DONE EXCAVATING - SAMPLING CREW BEGINGS DOING
	HEAD SPACE MONITORING TR MEASURES SAMPLE POINT IN
	EXCAVATION. TR ORDERS BACKFILL FROM VULCAN MATERIALS.
	LOADER STARTING TO RUN BAD.
1200	CREW BREAKS FOR LUNCH - TR TELL USACE WE WILL DO OWS NEXT TUES.
1230	USACE CHEMIST SAYS WE DO NOT HAVE ENOUGH SAMPLE JARS.
	TR TELLS HER TO LET HIM KNOW HOW MANY. LAB RUNNER IS
	ALREADY DROPPING OFF 1-LITE + 16 OZ JARS RUNNER ON SITE
1400	USACE CHEMIST SAYS WE HAVE TO EXCAVATE 3'×3' AREA
	FROM SW CORNER OF EXCAVATION. THEY HAD A SLIGHT
	HEAD SPACE HIT. IEPA SAYS SHE IS OK WITH 0-5 PPM
	"DON'T OVERKILL". BEGIN SAMPLING WASH RACK EXCAVATION.
	STILL ALOT OF CONFUSION ABOUT SAMPLING PLAN. USACE SAYS
	WERE STILL SHORT JARS BUT WILL NOT TELL TR WHAT TO
	ORDER. TR NOW DOING ALOT OF THE SAMPLING.
1930	CREW DEPARTS SITE DW + BL GO TO FEDX TO SHIP
	SAMPLES

Prepared By RINGBOLT Customer Rep.

Site Supervisor RINGBOLT Title

Project Mgr. FACCI Date

FERGUSON·HARBOUR
INCORPORATED

ASSOCIATE/VISITOR SITE LOG

Page 1 of 1

Project # 17297
Date Sept 12, 02 Day Thursday
Project Name USACE Ft Deerborn
Project Location Chicago, Il
Company Name USACE
Project Description SAMPLE, OWS REMOVAL BACKFILL
Customer Rep DON MANGIALARDO

DATE	NAME	SIGNATURE	COMPANY NAME	PURPOSE OF VISIT	TIME IN	TIME OUT
9/12/02	David Whiseman	[signature]	FHI	Work	0630	1930
9/12/02	GREG KNIGHT	Gregory G. Knight	FHI	WORK	0630	1930
9/12/02	BRUCE EUTSLER	[signature]	FHI	WORK	0630	1930
9/12/02	BRENT COEN	[signature]	FHI	WORK	0630	1930
9/12/02	DON MANGIALARDO	D Mangialardo	Corps of Engrs	QA	0700	
9/12/02	Rebecca Oswald	[signature]	IEPA	Oversite	0730	

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FERGUSON HARBOUR
INCORPORATED

DAILY SAFETY MEETING

Project # 17297 Date Sept 12, 02 Day Thursday

Project Name USACE Ft Dearborn Project Location Chicago, IL

Company Name USACE Project Description EMCL, OWS REMOVAL

Customer Rep DON MANGIALARDO BACKFILL

Time Started 0630 Time Completed 0700

Meeting Conducted By RIVEBOLT

☐ Emergency Response ☐ Industrial ☒ Contract

Project Manager EACCI

Site Health & Safety RIVEBOLT

Site Supervisor RIVEBOLT

#FHI Associates 5 #Subcontractors ____ #Others ____

SIGNED BY ALL IN ATTENDANCE

1. [illegible]
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i Daily Scope of Work: SAMPLE EXCAVATION AREAS, REMOVE OIL WATER SEPERATOR, BACKFILL

ii Daily Chemical Hazards: NA

Chemical	Exposure Limit	Route of Entry	Symptoms

iii Daily Physical Hazards: SLIPS, TRIPS, FALLS; STRAINS FROM LIFTING, HEAT STRESS, HEAVY EQUIPMENT

iv Accidents Reviewed: NONE

v Comments/Suggestions: NONE

vi Protective Levels Task

Level	PPE Description	Work Task	Type Cartridge if Level C
D	HARD HAT, SAFETY GLASSES, STEEL TOED BOOTS	ALL	NA

Prepared By RIVEBOLT Title FM

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FERGUSON·HARBOUR
INCORPORATED

ACTIVITY MEETING/INSPECTION REPORT

Contract No. DACA-27-97-D-007	Client: U.S. ARMY CORPS OF ENGINEER
Project No. 17297	Project Name: U.S. ACE FT DEARBORN
Activity No. 16	Activity Name: ~~SAMPLE DRUM EXCAVATION AREA~~
Activity Description: SAMPLE DRUM EXCAVATION AREA + BACK FILL	

Date: SEPT 13, 02	Day: FRIDAY	Time: 0630

Check (✓) the appropriate box below.

☒ Preparatory Meeting	☐ Initial Inspection/Meeting	☐ Follow-up Inspection/Meeting

Meeting/Inspection Attendees:	
[illegible]	
[illegible]	
[illegible]	

Scope of Activity:

A- SAMPLE DRUM EXCAVATION AREA

B- BACK FILL AND COMPACT DRUM EXCAVATION AREA AND WASH RACK

C DEMOBE UNITS 9-17-02

Project No. 17297	Activity No. 16

Labor to be used:	
CHEMIST	
2-EO'S	
1-LABORER	

Equipment to be used:	
LOADER	
EXCAVATOR	
ROLL-OFFS	

Materials to be used:	
C-AG STONE	

Quality Control/Assurance Concerns: NONE

Additional Comments/Notes (attach additional pages if required):
Completed by T. Krutz

FERGUSON·HARBOUR
INCORPORATED

Page ____ of ____

Project # 17297 Date 9-13-02 Day FRIDAY

Project Name USACE FT DEARBORN Project Location Chicago IL

Company Name USACE Project Description SAMPLE MONITOR

Customer Rep DON MANGALARDO

Weather Temperature ____ AM ____ °F ____ PM ____ °F

TIME	DESCRIPTION OF ACTIVITIES AND EVENTS
0630	SAFETY AND OPS MEETING.
0700	CREW BEGINS COMPLETING SAMPLING WATER BACK
0800	CREW BEGINS SAMPLING DRUM EXCAVATION AREA - BAKER TANK ONSITE
1000	CREW ~~BEGINS~~ BEGINS BACKFILLING EXCAVATED AREAS
	GK BACKING AND DOCUMENTING SAMPLES - CREW PUMPS OUT OWS.
1100	BC RUNS GK BACK TO HOTEL SO HE CAN CATCH SHUTTLE TO
	AIRPORT - TR CONTINUES PACKAGING SAMPLES.
1300	CREW DEPARTS SITE TAKES SAMPLES TO FED-X. WILL RETURN
	TO SITE ON 9-17-02

Prepared By RINGBOLT Customer Rep. ____

Site Supervisor RINGBOLT Title ____

Project Mgr. SACCI Date ____

FERGUSON HARBOUR INCORPORATED

DAILY SAFETY MEETING

Page 1 of 1

Project # 17297

Date Sept 13, 2002 Day Friday

Project Name USACE FT DEARBORN

Project Location Chicago, Il

Company Name U.S. ACE

Project Description Sample, Back Fill

Customer Rep DON MANGSALARDO

Time Started 0630 Time Completed 0700

Meeting Conducted By RINEBOLT

☐ Emergency Response ☐ Industrial ☒ Contract

Project Manager FACCI

Site Health & Safety RINEBOLT

Site Supervisor RINEBOLT

#FHI Associates 5 #Subcontractors ____ #Others ____

SIGNED BY ALL IN ATTENDANCE.

1. [signature]
2. Gregory C. Kingly
3. [signature]
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i. Daily Scope of Work: SAMPLE WASH SINK, DRUM AREA, BACKFILL

ii. Daily Chemical Hazards

Chemical	Exposure Limit	Route of Entry	Symptoms
VOC SVOC	VARIOUS		

iii. Daily Physical Hazards: SLIPS, TRIPS, FALLS, STRAINS FROM LIFTING, HEAT STRESS, HEAVY EQUIPMENT

iv. Accidents Reviewed: NONE

v. Comments/Suggestions: NONE

vi. Protective Levels Task

Level	PPE Description	Work Task	Type Cartridge if Level C
D	HARD HAT, SAFETY GLASSES, STEELED TOED BOOTS	ALL	—

Prepared By Rinebolt Title RM

White-Central File Yellow-Project File, Pink-Customer Copy

FERGUSON·HARBOUR
INCORPORATED

ASSOCIATE/VISITOR SITE LOG

Project # 17297
Date SEPT 13, 2002 Day FRIDAY
Project Name U.S. ACE FT DEARBORN
Project Location CHICAGO, IL
Company Name U.S. ACE
Project Description SAMPLE, BACKFILL
Customer Rep DON MANGIALARDO

DATE	NAME	SIGNATURE	COMPANY NAME	PURPOSE OF VISIT	TIME IN	TIME OUT
9-13	Tom Rinebolt	[signature]	FHI	WORK	0630	
9-13	BRENT COEN	[signature]	FHI	WORK	0630	
9/13/02	GREG KNIGHT	Gregory A. Knight	FHI	WORK	0630	
9/13/02	BRUCE EUTSLER	[signature]	FHI	WORK	0630	
9/13/02	DON MANGIALARDO	D Mangialardo	Corps of Engrs	QA	7:20	

White-Centrail File; Yellow-Project File; Pink-Customer Copy

FERGUSON·HARBOUR
INCORPORATED

ACTIVITY MEETING/INSPECTION REPORT

Contract No. DACA-27-97-D-007	Client: U.S. ARMY CORPS OF ENGINEERS
Project No. 17297	Project Name: USACE FT DEARBORN
Activity No. 16	Activity Name: BACKFILL + SAMPLE, EXCAVATE
Activity Description: ~~COMPLETE~~ EXCAVATE AND REMOVE OWS-1, B-SAMPLE AND BACKFILL	

Date: 9-17-02	Day: TUES	Time: 0630

Check (✓) the appropriate box below.

[X] Preparatory Meeting	[ ] Initial Inspection/Meeting	[ ] Follow-up Inspection/Meeting

Meeting/Inspection Attendees:	
Duane Bauer	
[illegible]	
[illegible]	
Tom [illegible]	

Scope of Activity:

A - REMOVE OWS-1

B - SAMPLE OWS-1

C BACKFILL OWS-1

D - REPLACE FENCE

Project No. 17297	Activity No. 16

Labor to be used:	
2 Operators	
1 Laborer	
1 Sup	

Equipment to be used:	
Excavator	
loader	
Compactor	

Materials to be used:	
C-11 STONE	

Quality Control/Assurance Concerns: none

Additional Comments/Notes (attach additional pages if required): none

Completed by: [illegible]

FERGUSON·HARBOUR
INCORPORATED

Page ____ of ____

Project # 17297 Date Sept 17 02 Day Tues

Project Name US ACE Ft DEARBORN Project Location Chicago, Il

Company Name U.S. ACE Project Description REMOVE DWS, SAMPLE, BACKFILL

Customer Rep DON MANCIALAROO

Weather Temperature ____ AM ____ °F ____ PM ____ °F

TIME	DESCRIPTION OF ACTIVITIES AND EVENTS
0630	SAFETY + OPTS MEETING
0700	CREW BEGINS REMOVING DWS. TR SET UP SAMPLING AREA.
	EXPLAINS TO USACE THAT WE WILL SAMPLE DWS TODAY AND
	DO ROLLOFFS AND BAKER TANK WED.
0730	VULCAN MATERIAL BEGINS BRINGING IN BACK FILL
1030	DWS REMOVED.
1100	TR DOES HEAD SPACE AT SAMPLE LOCATIONS
1130	TR DOES BOTTOM SAMPLES - THEN WILL BACK FILL UP
	TO WALL SAMPLE LEVEL - FENCING CONTRACTOR ONSITE
1200	CREW BREAKS FOR LUNCH.
1230	TR CONTINUES SAMPLING EXCAVATION OF DWS.
1500	TR COMPLETES SAMPLING DWS. CREW CONTINUES TO BACKFILL
1830	BACKFILL COMPLETE - FENCE BACK IN PLACE
1900	DW + BC TAKE SAMPLES TO FED-X CREW DEPARTS SITE

Prepared By RINEBOLT Customer Rep. ____

Site Supervisor RINEBOLT Title ____

Project Mgr. FACCI Date ____

FERGUSON·HARBOUR
INCORPORATED

ASSOCIATE/VISITOR SITE LOG

Project # 17297
Date Sept 17 2002 Day Tues
Project Name U.S.A.C.E FT DEARBORN
Project Location Chicago IL
Company Name U.S ACE
Project Description SAMPLE, EXCAVATION
Customer Rep DON MANGIALARDO

DATE	NAME	SIGNATURE	COMPANY NAME	PURPOSE OF VISIT	TIME IN	TIME OUT
9-17-02	Tom Rueboll	[signature]	FHI	WORK	0630	1900
9-17-02	Dwayne Boys	Dwayne Boys	FHI	WORK	0630	1900
9-17-02	Brent Coen	[signature]	FHI	WORK	0630	1930
9-17-02	David Whisenant	[signature]	FHI	Work	0630	1930
9-17-02	Don MANGIALARDO	D Mangialardo	Corps of Engrs	QA	8:00	1830

White-Centrail File; Yellow-Project File; Pink-Customer Copy

FERGUSON HARBOUR INCORPORATED

DAILY SAFETY MEETING

Project # 17297

Date Sept 17, 2002 Day Tuesday

Project Name U.S. ACE FT DEARBORN

Project Location Chicago, Il

Company Name US ACE

Project Description SAMPLE EXCAVATE OWS, BACKFILL

Customer Rep

Time Started 0630 Time Completed 0700

Meeting Conducted By RINEBOLT

☐ Emergency Response ☐ Industrial ☒ Contract

Project Manager FACCI

Site Health & Safety RINEBOLT

Site Supervisor RINEBOLT

#FHI Associates 4 #Subcontractors ____ #Others ____

SIGNED BY ALL IN ATTENDANCE.

1. [signature]
2. [signature]
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i. Daily Scope of Work: EXCAVATE OWS SAMPLE BACK FILL

ii. Daily Chemical Hazards

Chemical	Exposure Limit	Route of Entry	Symptoms
VARIOUS VOC			

iii. Daily Physical Hazards: SLIPS, TRIPS, FALLS, STRAINS FROM LIFTING, HEATSTRESS, HEAVY EQUIPMENT

iv. Accidents Reviewed: NONE

v. Comments/Suggestions: NONE

vi. Protective Levels Task

Level	PPE Description	Work Task	Type Cartridge if Level C
D	HARD HAT, SAFETY GLASSES STEEL TOED BOOTS	ALL	NA

Prepared By Rinebolt Title RM

White-Central File, Yellow-Project File, Pink-Customer Copy

FERGUSON·HARBOUR
INCORPORATED

ACTIVITY MEETING/INSPECTION REPORT

Contract No. DACA27-97-D-0007	Client: USACE
Project No. 17297	Project Name: Various Site Remediations – Ft Dearborn, IL
Activity No. 16	Activity Name: BACKFILL, SAMPLE
Activity Description: complete backfilling, seed, sample roll offs	

Date: 9.18.02	Day: Wed	Time: 2530
Check (✓) the appropriate box below.		
[X] Preparatory Meeting	[ ] Initial Inspection/Meeting	[ ] Follow-up Inspection/Meeting

Meeting/Inspection Attendees:	
Tom Ringbolt	
Duane Bass	
Brent Cox	
Dave Whisenant	

Scope of Activity:

A. BACKFILL, GRADE, + SEED DWS. 1

B. SAMPLE ROLL-OFFS AND WATER TANK

Project No. 17297	Activity No. 16

Labor to be used:	
2 OPERATORS	
2 LABORES	
1 - SUP	

Equipment to be used:	
TRACKHOE	
LOADER	
SKID LOADER	

Materials to be used:	
TOP SOIL, SEED	

Quality Control/Assurance Concerns:
NONE

Additional Comments/Notes (attach additional pages if required):
NONE
Completed by T. Rist

FERGUSON·HARBOUR
INCORPORATED

Page ____ of ____

Project # 17297 | Date SEPT 18, 2002 | Day WED

Project Name USACE Ft DEARBORN | Project Location Chicago, IL

Company Name U.S. ACE | Project Description BACKFILL, SEED EXCAVATION, SAMPLE ROLL-OFFS

Customer Rep DON MANGIALARDO

Weather | Temperature ____ AM ____ °F ____ PM ____ °F

TIME	DESCRIPTION OF ACTIVITIES AND EVENTS
0630	SAFETY AND OPTS MEETING
0800	BC + DW GO AND PICK UP TOP SOIL AND SEED + GB PLACES
	MORE STONE IN EXCAVATION + TR CALLS UNITED TO GET LOADER LOOKED AT
0900	ON TR SAMPLE ROLL-OFFS. DRUM, BAKER TANK - SKID LOADER ONSITE
1100	~~CORE~~ USACE HAS US SPREAD REMAINING STONE ON
	PAD NEAR DWS AND RE-GRADE WASH RACK
1200	CREW BREAKS FOR LUNCH
1230	TR CONTINUES SAMPLING CREW BEGINS CLEANING UP AND
	SECURING SITE
1400	SAMPLING COMPLETED. TR CALLS UNITED TO SEE WHAT TIME
	THEY WILL BE ONSITE TO PICK UP EQUIPMENT. THEY SAID I'LL
	WE PARK IT OUT THE GATE ON THURS DAY MORNING. THEY WILL
	PICK UP EQUIPMENT
1600	DW + BC DEMOBE SITE, TR GB CONTINUE PACKING SAMPLES
1730	TR GB DEPART SITE, DROP OFF SAMPLES AT FEDEX

Prepared By RINEBOLT | Customer Rep. ____

Site Supervisor RINEBOLT | Title ____

Project Mgr. SACCI | Date ____

FERGUSON·HARBOUR
INCORPORATED

ASSOCIATE/VISITOR SITE LOG

Page 1 of 1

Project # 17297

Date Sept 18, 2002 Day WED

Project Name U.S. ACE Ft DEARBORN

Project Location Chicago, Il

Company Name US. ACE

Project Description BACKFILL, SAMPLE ROLLOFFS

Customer Rep DON MANGIALARDO

DATE	NAME	SIGNATURE	COMPANY NAME	PURPOSE OF VISIT	TIME IN	TIME OUT
9-18-02	Tom Rinebolt	[signature]	FHI	WORK	0630	1730
9-18-02	Dwayne Boys	Dwayne Boys	FHI	work	0630	1730
9-18-02	BRENT COEN	[signature]	FHI	WORK	0630	1600
9-18-02	David Whisenant	[signature]	FHI	Work	0630	1600
9-18-02	DON MANGIALARDO	D Mangialardo	Corps of Engineers	QA	0800	1700

White-Centrail File; Yellow-Project File; Pink-Customer Copy

FERGUSON HARBOUR INCORPORATED

DAILY SAFETY MEETING

Page ____ of ____

Project # 17297 Date Sept 18, 02 Day Wed

Project Name U.S. ACE Ft Dearborn Project Location Chicago, Il

Company Name U.S. ACE Project Description SAMPLE, BACKFILL

Customer Rep DON MANGIALARDO

Time Started 0730 Time Completed 0700

Meeting Conducted By RINEBOLT

☐ Emergency Response ☐ Industrial ☒ Contract

Project Manager CACCI

Site Health & Safety RINEBOLT

Site Supervisor RINEBOLT

#FHI Associates 4 #Subcontractors ____ #Others ____

SIGNED BY ALL IN ATTENDANCE.

1. [signature]
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I. Daily Scope of Work: BACKFILL, SAMPLE ROCK-OFF

II. Daily Chemical Hazards

Chemical	Exposure Limit	Route of Entry	Symptoms
CARBON VOC			

III. Daily Physical Hazards: SLIPS, TRIPS, FALL, HEAVY EQUIPMENT, STRAINS FROM LIFTING, HEAT STRESS

IV. Accidents Reviewed: NONE

V. Comments/Suggestions: NONE

VI. Protective Levels Task

Level	PPE Description	Work Task	Type Cartridge if Level C
D	HARD HAT, SAFETY GLASSES, STEEL TOED BOOTS,	ALL	N/A

Prepared By RINEBOLT Title RM

White-Central File Yellow-Project File Pink-Customer Copy

FERGUSON·HARBOUR
INCORPORATED

ACTIVITY MEETING/INSPECTION REPORT

Contract No. DACA27-97-D-0007	Client: USACE U.S. ARMY CORPS OF ENGINEERS
Project No. 17297	Project Name: Various Site Remediations – Ft Dearborn, IL
Activity No.	Activity Name: DEMOBILIZATION
Activity Description: PARK EQUIPMENT OUT SIDE GATE, DEMOBILIZATION FROM SITE BACK TO FERGUSON HARBOUR LOCATED IN FINDLAY, OHIO	

Date: 19 SEPT 02	Day: THURSDAY	Time: 0630
Check (✓) the appropriate box below.		
☑ Preparatory Meeting	☐ Initial Inspection/Meeting	☐ Follow-up Inspection/Meeting

Meeting/Inspection Attendees:	
RINEBOLT, TOM	
BAYS, DWAYNE	

Scope of Activity: PARK HEAVY EQUIPMENT OUTSIDE THE GATE FOR SUB-CONTRACTOR TO PICKUP. DEPART SITE AND DRIVE BACK TO FINDLAY, OHIO.

Project No. 17297	Activity No.

Labor to be used:	
1- SUPERVISOR	

Equipment to be used:	
1- 1 TON TRUCK	
1- AIR COMPRESSOR	

Materials to be used:	
NONE	

Quality Control/Assurance Concerns:
NONE

Additional Comments/Notes (attach additional pages if required):
NONE
Completed by [illegible]

FERGUSON·HARBOUR
INCORPORATED

ASSOCIATE/VISITOR SITE LOG

Page ___ of ___

Project # 17297

Date 19 SEPT 02 Day THURSDAY

Project Name U.S. ACE Ft DEARBORN

Project Location CHICAGO, IL

Company Name U.S. ARMY CORPS OF ENGINEERS

Project Description DEMOBILIZATION

Customer Rep DON MANGIALARDO

DATE	NAME	SIGNATURE	COMPANY NAME	PURPOSE OF VISIT	TIME IN	TIME OUT
9-19-02	Duane Bays	Duane Bays	FHI	WORK	0630	1100
9-19-02	TOM RINEBOLT	[illegible]	FHI	WORK	0630	1100

White-Centrail File; Yellow-Project File; Pink-Customer Copy

FERGUSON HARDOON INCORPORATED

DAILY SAFETY MEETING

Project # 17297 Date 19 SEPT 02 Day THURSDAY

Project Name U.S. ACE Ft DEARBORN Project Location CHICAGO, IL

Company Name U.S. ARMY CORPS OF ENGINEERS. Project Description DEMORIZATION

Customer Rep DON MANGALAROO

Time Started 0630 Time Completed 0645

Meeting Conducted By RINCBOT

☐ Emergency Response ☐ Industrial ☒ Contract

Project Manager JIM FACCI

Site Health & Safety RINCBOT

Site Supervisor RINCBOT

#FHI Associates 2 #Subcontractors ____ #Others ____

I Daily Scope of Work: MOVE EQUIPMENT TO OUTSIDE FENCE, DEMORILIZE

II Daily Chemical Hazards: NONE

Chemical	Exposure Limit	Route of Entry	Symptoms

III Daily Physical Hazards: HEAVY EQUIPMENT, TRAFFIC.

IV Accidents Reviewed: NONE

V Comments/Suggestions: NONE

VI Protective Levels Task

Level	PPE Description	Work Task	Type Cartridge if Level C
D	HARD HAT, SAFETY GLASSES, STEEL TOED BOOTS	ALL	NA

SIGNED BY ALL IN ATTENDANCE.

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Prepared By Tom Rincbot Title Supervisor

White-Central File Yellow-Project File Pink-Customer Copy

THE Following (4) pages contain
Sample information spreadsheets

[illegible]		[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

TOM RINEBOLT
BRENT COEN
DAVE
BRUCE EUTSLER
MYSELF
REBECCA
KATHY
DON
BOB

Location Code	Sample ID#	Date-Time	Temperature	Weather	Sampler Initials
OTH-1	FIP-001-06-SSS	9/11/02 / 1545	74°F	CLEAR	GAK
OTH-1	FIP-001-06-SSS MS/MSD	9/11/02 / 1545	74°F	CLEAR	GAK
OTH-1	FIP-001-06-SSS-MS	9/11/02 / 1545	74°F	CLEAR	GAK
OTH-1	FIP-001-06-SSS-MSD	9/11/02 / 1545	74°F	CLEAR	GAK
OTH-1	FIP-004-06-SSS	9/11/02 / 1650	73°F	CLEAR	GAK
OTH-1	FIP-002-06-SSS (1)	9/11/02 / 1736	73°F	CLEAR	DW / GAK
OTH-1	FIP-003-06-SSS (2) (3)	9/11/02 / 1547	73°F	CLEAR	GAK / DW
OTH-1	FIP-003-06-ERB	9/11/02 / 1527	73°F	CLEAR	GAK
~~OTH-1~~ GAK	~~FIP-00~~ GAK				
OTH-3	VWR-005-02-EBT	9/12/02 / 1041	75°F	CLEAR	GAK, KJK
OTH-3	VWR-005-02-MS/MSD	9/12/02 / 1041	75°F	CLEAR	GAK, KJK
OTH-3	VWR-005-02-MS	9/12/02 / 1041	75°F	CLEAR	GAK, KJK
OTH-3	VWR-005-02-MSD	9/12/02 / 1041	75°F	CLEAR	GAK, KJK
OTH-3	VWR-005-02-EBT	9/12/02 / 1041	75°F	CLEAR	GAK, K
OTH-3	VWR-005-02-MS/MSD	9/12/02 / 1041	75°F	CLEAR	GAK, KJK
OTH-3	VWR-006-02-EBT	9/12/02 / 1246	76°F	CLEAR	GAK, KJK
OTH-3	VWR-006-02-EBT	9/12/02 / 1246	76°F	CLEAR	GAK, KJK
OTH-3	VWR-006-02-EBT QA	9/12/02 / 1246	76°F	CLEAR	GAK, KJK
OTH-3	VWR-006-02-EBT QA	9/12/02 / 1246	76°F	CLEAR	GAK, KJK
OTH-3	VWR-008-02-EBT (4)	9/12/02 / 1246	76°F	CLEAR	GAK, KJK
OTH-3	VWR-003-02-ESW	9/12/02 / 1246	76°F	CLEAR	GAK, KJK
OTH-3	VWR-003-02-ESW	9/12/02 / 1246	76°F	CLEAR	GAK, KJK
OTH-3	VWR-004-02-ESW	9/12/02 / 1330	76°F	CLEAR	GAK, KJK
OTH-3	VWR-004-02-ESW	9/12/02 / 1330	76°F	CLEAR	GAK, KJK

Description	Sample Location from fixed point	Analysis Requested
SUBSURFACE SOIL 6'-7' DEEP	SOUTHEAST HOLE IN FLOOR 6' DEEP	VOC, SVOC, PAH, PCB, TAL METALS
SUBSURFACE SOIL 6'-7' DEEP	SOUTHEAST HOLE IN FLOOR 6' DEEP	SVOC, PAH, PCB, TAL METALS
SUBSURFACE SOIL 6'-7' DEEP	SOUTHEAST HOLE IN FLOOR 6' DEEP	VOC
SUBSURFACE SOIL 6'-7' DEEP	SOUTHEAST HOLE IN FLOOR 6' DEEP	VOC
SUB SURFACE SOIL 6'-7' DEEP	NORTHEAST HOLE IN FLOOR 6' DEEP	VOC, SVOC, PAH, PCB, TAL METALS
SUB SURFACE (1) SOIL 6'-7' DEEP	SOUTHWEST HOLE IN FLOOR 6'6" DEEP	VOC, SVOC, PAH, PCB, TAL METALS
SUB SURFACE SOIL 7'-8' DEEP	NORTHWEST HOLE IN FLOOR 7'6" DEEP	VOC, SVOC, PAH, PCB, TAL METALS
RINSATE	SOUTHWEST HOLE IN FLOOR	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION BOTTOM 2' DEEP	LOCATION #5 ON DRAWING (EAST, MIDDLE OF AREA)	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION BOTTOM 2' DEEP	LOCATION #5 ON DRAWING (EAST, MIDDLE OF AREA)	SVOC, PAH, PCB, TAL METALS
EXCAVATION BOTTOM 2' DEEP	LOCATION #5	VOC
EXCAVATION BOTTOM 2' DEEP	LOCATION #5	VOC
EXCAVATION BOTTOM 2' DEEP	LOCATION #5	GLYCOL
EXCAVATION BOTTOM 2' DEEP	LOCATION #5	GLYCOL
EXCATION BOTTOM 2' DEEP	LOCATION #6	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION BOTTOM 2' DEEP	LOCATION #6	GLYCOL
EXCAVATION BOTTOM 2' DEEP	LOCATION #6	VOC, SVOC, PAH, PCB, TAL METALS
EXCATION BOTTOM 2' DEEP	LOCATION #6	GLYCOL
EXCAVATION BOTTOM 2' DEEP	LOCATION #6	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION SIDEWALL 2' DEEP	LOCATION #3	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION SIDEWALL 2' DEEP	LOCATION #3	GLYCOL
EXCAVATION SIDEWALL 2' DEEP	LOCATION #4	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION SIDEWALL 2' DEEP	LOCATION #4	GLYCOL
(1) BECAUSE OF OBSTRUCTION WE WENT DOWN ANOTHER 6" IN ORDER TO COLLECT SAMPLE (2) SAMPLES WERE FILLED OUT OF ORDER + LABELS WERE CHANGED TO RETAIN THE ORDER (3) BECAUSE OF OBSTRUCTION WE WENT DOWN ANOTHER 1' IN ORDER TO COLLECT SAMPLE (4) DUPLICATE OF UWR-006-02-EBT (NAME GLYCOL)		

Location Code	Sample ID#	Date-Time	Temp	Weather	1/1/94 Sampler Initials UF 1st & 2nd in Vol.
OTH-3	UWR-008-02-EBT (5)	9/12/02 / 1246	76°F	CLEAR	GAK, KJK
OTH-3	UWR-007-04-ERB	9/12/02 / 1430	76°F	CLEAR	GAK
OTH-3	UWR-002-02-ERB	9/12/02 / 1430	76°F	CLEAR	GAK
OTH-2	FSS-005-08-EBT	9/12/02 / 1605	76°F	CLEAR	GAK
OTH-2	FSS-006-05-EBT	9/12/02 / 1611	76°F	CLEAR	GAK
OTH-2	FSS-006-05-EBT QA	9/12/02 / 1611	76°F	CLEAR	GAK
OTH-2	FSS-007-05-EBT	9/12/02 / 1611	76°F	CLEAR	GAK
~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~
OTH-3	UWR-002-02-ESW	9/12/02 / 1715	74°F	CLEAR	GAK
OTH-3	UWR-002-02-ESW	9/12/02 / 1715	74°F	CLEAR	GAK
OTH-3	UWR-007-04-EBT	9/12/02 / 1722	74°F	CLEAR	GAK
OTH-3	UWR-007-04-EBT	9/12/02 / 1722	74°F	CLEAR	GAK
OTH-3	UWR-001-03-EBT	9/12/02 / 1730	74°F	CLEAR	GAK
OTH-3	UWR-001-03-EBT	9/12/02 / 1730	74°F	CLEAR	GAK
OTH-3	UWR-002-02-~~EBT~~ ERB	9/12/02 / 1500	76°F	CLEAR	GAK
OTH-3	UWR-002-02-ERB	9/12/02 / 1500	76°F	CLEAR	GAK
OTH-3	UWR-004-02-ESW	9/12/02 / 1330	76°F	CLEAR	GAK
OTH-3	UWR-004-02-ESW	9/12/02 / 1330	76°F	CLEAR	GAK
OTH-3	UWR-002-02-ERB	9/12/02 / 1500	76°F	CLEAR	GAK
OTH-~~3~~ 2 GAK	FSS-005-08-EBT	9/12/02 / 1605	76°F	CLEAR	GAK
OTH-2	FSS-006-05-EBT	9/12/02 / 1611	76°F	CLEAR	GAK
OTH-2	FSS-007-05-EBT (6)	9/12/02 / 1611	76°F	CLEAR	GAK
OTH-3	UWR-002-02-ESW	9/12/02 / 1715	74°F	CLEAR	GAK
OTH-3	UWR-007-04-EBT	9/12/02 / 1722	74°F	CLEAR	GAK

(5) DUPLICATE OF UWR-006-02-EBT (CYNOL)
(6) DUPLICATE OF FSS-006-05-EBT

4

Description	Sample Location from Fixed Point	Analysis Requested
EXCAVATION BOTTOM 2' DEEP	LOCATION #6 ON DRAWING	GLYCOL
RINSATE	LOCATION #7 ON DRAWING	VOC
RINSATE	LOCATION #2 ON DRAWING	VOC
EXCAVATION BOTTOM 7'10" DEEP	LOCATION #5 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION BOTTOM 4'7" DEEP	LOCATION #6 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION BOTTOM 4'7" DEEP	LOCATION #6 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION BOTTOM 4'7" DEEP	LOCATION #6 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION SIDEWALL 2' DEEP	LOCATION #2 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION SIDEWALL 2' DEEP	LOCATION #2 ON DRAWING	GLYCOL
EXCAVATION BOTTOM 4' DEEP	LOCATION #7 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION BOTTOM 4' DEEP	LOCATION #7 ON DRAWING	GLYCOL
EXCAVATION BOTTOM 3' DEEP	2' WEST + 1' DOWN FROM ORIGINAL SIDEWALL LOCATION	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION BOTTOM 3' DEEP	2' WEST + 1' DOWN FROM ORIGINAL SIDEWALL LOCATION	GLYCOL
RINSATE	LOCATION #2 ON DRAWING	SVOC, PAH
RINSATE	LOCATION #2 ON DRAWING	PCB
EXCAVATION BOTTOM 2' DEEP	LOCATION #4 ON DIAGRAM	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION SIDEWALL 2' DEEP	LOCATION #4 ON DIAGRAM	GLYCOL
RINSATE	LOCATION #2 ON DRAWING	METALS (TAL)
EXCAVATION BOTTOM 7'10" DEEP	LOCATION #5 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION BOTTOM 4'7" DEEP	LOCATION #6 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION BOTTOM 4'7" DEEP	LOCATION #6 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION SIDEWALL 2' DEEP	LOCATION #2 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS, GLYCOL
EXCAVATION BOTTOM 4' DEEP	LOCATION #7 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS, GLYCOL

INTENTIONALLY

LEFT

BLANK

GREG KNIGHT FT. DEARBORN USARC CHICAGO, IL
9/11/02

1040 MINI CALIBRATED @ 98.8 ppm ISOBUTYLENE @ A SPAN OF 5.2

START: 0630

TEMP: 60°F @ 0630

WEATHER: CLEAR, COOL, WIND E @ 5-10 MPH

GREG KNIGHT 9/12/02 FT. DEARBORN USARC CHICAGO, IL

START: 0630

TEMP: 60°F @ 0830

WEATHER: CLEAR, COOL, WIND CALM

0849 MINI CALIBRATED @ 98.8 ppm ISOBUTYLENE @ A SPAN OF 5.22

0930 COMPLETED HEADSPACE SAMPLING @ OTH-3

0950 SAMPLE 1 HEADSPACE 50.0

2	0.0
3	0.4
4	0.6
5	0.8
6	1.0
7	1.1

VWR-001 HEADSPACE TAKEN AGAIN @ 1655 → 1.0 ppm

9/13/02 GREG KNIGHT FT. DEARBORN USARC CHICAGO, IL

START: 0630 TEMP: 63°F @ 0730

WEATHER: CLEAR, COOL, WIND CALM - 5 MPH SW

0915 MINI CALIBRATED @ 98.8 ppm ISOBUTYLENE @ A SPAN OF 4.68

0929 VWR-001-03-ESW READS 0.0 - CLEAN!

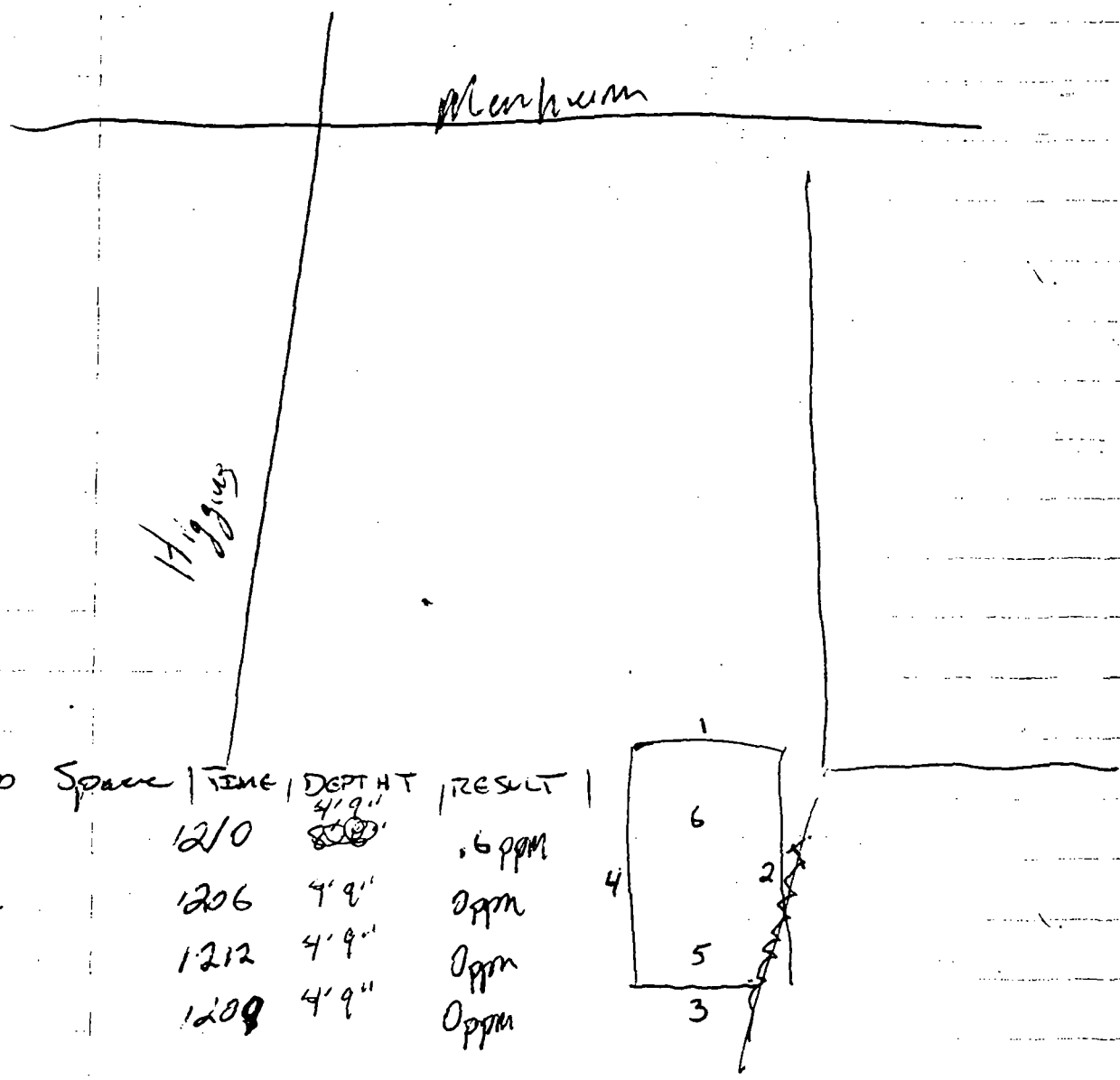
LOCATION CODE	SAMPLE ID #	DATE/TIME	TEMP	WEATHER	SAMPLE INITIALS
OTH-3	UWR-001-03-EBT	9/12/02/1730	72°F	CLEAR	GAK
OTH-2	FSS-004-04-ESW	9/13/02 0730	63°F	CLEAR	GAK
OTH-2	FSS-003-04-ESW	9/13/02 0735	62°F	CLEAR	GAK
OTH-2	FSS-002-04-ESW	9/13/02 0746	62°F	CLEAR	GAK
OTH-2	FSS-001-04-ESW	9/13/02 0808	63°F	CLEAR	GAK
OTH-2	(7) FSS-008-04-ESW MS/MSD	9/13/02 0808	63°F	CLEAR	GAK
OTH-2	(7) FSS-008-04-ESW-MS	9/13/02 0808	63°F	CLEAR	GAK
OTH-2	FSS-008-04-ESW-MSD	9/13/02 0808	63°F	CLEAR	GAK
OTH-3	UWR-001-03-ESW	9/13/02 @934	66°F	CLEAR	GAK
OWS-1	OWS-005-08-MSD	9-17-02	81°F	CLOUDY	THR
OWS-1	OWS-005-08-EBT	9-17-02	81°F	CLOUDY	THR
OWS-1	OWS-05-08-MS	9-17-02	81°F	CLOUDY	THR
OWS-1	OWS-06-08-EBT	9-17-02	81°F	CLOUDY	THR
OWS-1	OWS-01-05-ESW	9-17-02	81°F	CLOUDY	THR
OWS-1	OWS-02-05-ESW	9-17-02	81°F	CLOUDY	THR
OWS-1	OWS-03-04-ESW	9-17-02	81°F	CLOUDY	THR
OWS-1	OWS-04-05-ESW	9-17-02	81°F	CLOUDY	THR
—	TEMPERATURE BLANK	9-17-02	76°	CLOUDY	THR
OTH-3	OTH3-RO-CC-001	9-18-02	75°	PTLY CLDY	THR
OTH-3	OTH3-RO-SO-001	9-18-02	77°	PTLY CLDY	THR
OWS-1	OWS1-RO-SO-001	9-18-02	79°	PTLY CLDY	THR
OWS-1	OWS1-RO-CC-001	9-18-02	79°	PTLY CLDY	THR

@(7) TAKEN AT UWR-001-04-ESW LOCATION

DESCRIPTION	SAMPLE LOCATION FROM FIXED POINT	ANALYSIS REQUIRED
EXCAVATION BOTTOM 3' DEEP	LOCATION #1 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS, GLYCOL
EXCAVATION SIDEWALL 42" DEEP	LOCATION #4 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION SIDEWALL 42" DEEP	LOCATION #3 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION SIDEWALL 42" DEEP	LOCATION #2 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION SIDEWALL 42" DEEP	LOCATION #1 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION SIDEWALL 42" DEEP	LOCATION #1 ON DRAWING	GAK ~~VOC~~, SVOC, PAH, PCB, TAL METALS
EXCAVATION SIDEWALL 42" DEEP	LOCATION #1 ON DRAWING	VOC
EXCAVATION SIDEWALL 42" DEEP	LOCATION #1 ON DRAWING	VOC
EXCAVATION SIDEWALL 3' DEEP	LOCATION #1 ON DRAWING	VOC, SVOC, PAH, PCB, GLYCOL, TAL METALS
	~~LOCATION #1~~ GAK	~~GLYCOL~~ GAK
EXCAVATION BOTTOM W. END	FROM NW CORNER OF BLDG 11' NORTH 3' WEST	VOC ~~TR VOC, SVOC, PAH, PCB, TAL METALS GLYCOL~~
EXCAVATION BOTTOM W. END	" 11' NORTH 3' WEST "	VOC, SVOC, PAH, PCB, TAL METAL GLYCOL
BOTTOM W END EXCAVATION	" 11' NORTH 3' WEST "	VOC
BOTTOM W END EXCAVATION SIDE WALL	11' NORTH 3' WEST	VOC
EAST SIDE SIDE WALL	11' NORTH 4'9" DEEP	VOC, SVOC, PAH, PCB, TAL METALS GLYCOL
SOUTH SIDE SIDE WALL	4' NORTH 4'9" DEEP	VOC, SVOC, PAH, PCB, TAL METALS GLYCOL
WEST SIDE SIDE WALL	11' NORTH 3'9" DEEP	VOC, SVOC, PAH, PCB, TAL METALS GLYCOL
NORTH SIDE	14'6" NORTH 4'9" DEEP	VOC, SVOC, PAH, PCB, TAL METALS, GLYCOL
BLANK	COOLER	TEMPERATURE
COMPOSITE SAMP RO-S 20-013	ROLL OFF-3	PAINT FILTER, FLASH POINT
20-009 20-006	20-013, 20-009, 20-006 ROLL OFFS	TCLP VOC, TCLP SVOC TCLP PCB, pH PAINT FILTER, FLASH POINT, TCLP VOC
COMPOSITE	20-008, 20-004, 20-003 ROLL OFFS	TCLP SVOC, TCLP PCB, pH PAINT FILTER, FLASH POINT, TCLP VOC
COMPOSITE	R25239R, R25326RT	TCLP SVOC, TCLP PCB, pH PAINT FILTER, FLASH POINT TCLP VOC
COMPOSITE	ROLL OFF R25353	TCLP SVOC, TCLP PCB, pH

9-17-02

PID Calibrate @ 4.98 Span @ 98 ppm 1150 AM T



HEAD Space	TIME	DEPTH	RESULT
Point 1	1210	4'9"	.6 ppm
2	1206	4'9"	0ppm
3	1212	4'9"	0ppm
4	1209	4'9"	0ppm
5	1203	8'6"	0ppm
6	[illegible]	8'6"	0ppm

10

N
7'
12'
9'
3'
6'
9'
11' 4'9" DEEP
11' 4'6" DEEP
DEPTH 8'6" TO TOP OF Concrete Sidewalk

Time SAMPLE 81° F

1
2
3
4
5 1231
6 1217

Blank

12

Blank

LOCATION CODE	SAMPLE ID#	DATE/TIME	TEMP	WEATHER	SAMPLER INT.
FSS	FSS-UR-SD-001	9-18-02 1313	79°	PTLY CLDY	TR
OWS	OWS1-BT-WT001	9-18-02 1345	79°	PTLY CLDY	TR

DESCRIPTION	SAMPLE LOCATION FROM FIXED POINT	ANALYSIS
GRAB SAMPLE	GRAB SAMPLE FROM DRUM IN OVERPACK FROM FORMER SHOP SINK	TCLP VOC, TCLP Metals TCLP PCB pH, Flash Point TCLP SVOC, paint filter
GRAB SAMPLE	GRAB SAMPLE OF WATER FROM BAKER TANK P-4229	

	Roll off	CONTENTS
X1	R25239R	SOIL FROM OWS-1
J2	R25353	CONCRETE FROM OWS-1
X3	20-006	CONCRETE FROM OTH-3 WASH RACK
X4	20-003	SOIL FROM OTH-3
X5	R25326RT	SOIL FROM OWS-1
X6	20-004	CONCRET, DIRT DEBRIS FROM OTH-3
X7	20-009	CONCRETE FROM OTH-3
X8	20-008	CONCRETE DIRT DEBRIS FROM OTH-3
X9	20-013	CONCRETE FROM OTH-3

DRUM - DISPOSAL - TCLP METALS VOC SVOC PCB

RENSATE - TANK - ALLAN-R3

BRET - MUST COMPLETE DEA PACKAGE - SIGNATURE

COMPOSITE GROUPS				DRUM	OWS/RINSATE
9	8	1	2	1	1
7	6	5			
3	~~5~~ 4				

RINSATE WATER INTO TANK

BAKER TANK P-4229

9-9-02 CREW MOBES TO CHICAGO, TOM RINEBOLT, BRUCE GUTSLER DAVE WHISENAT, BRET COEN. GREG KNIGHT WILL FLY IN ON TUESDAY AM.

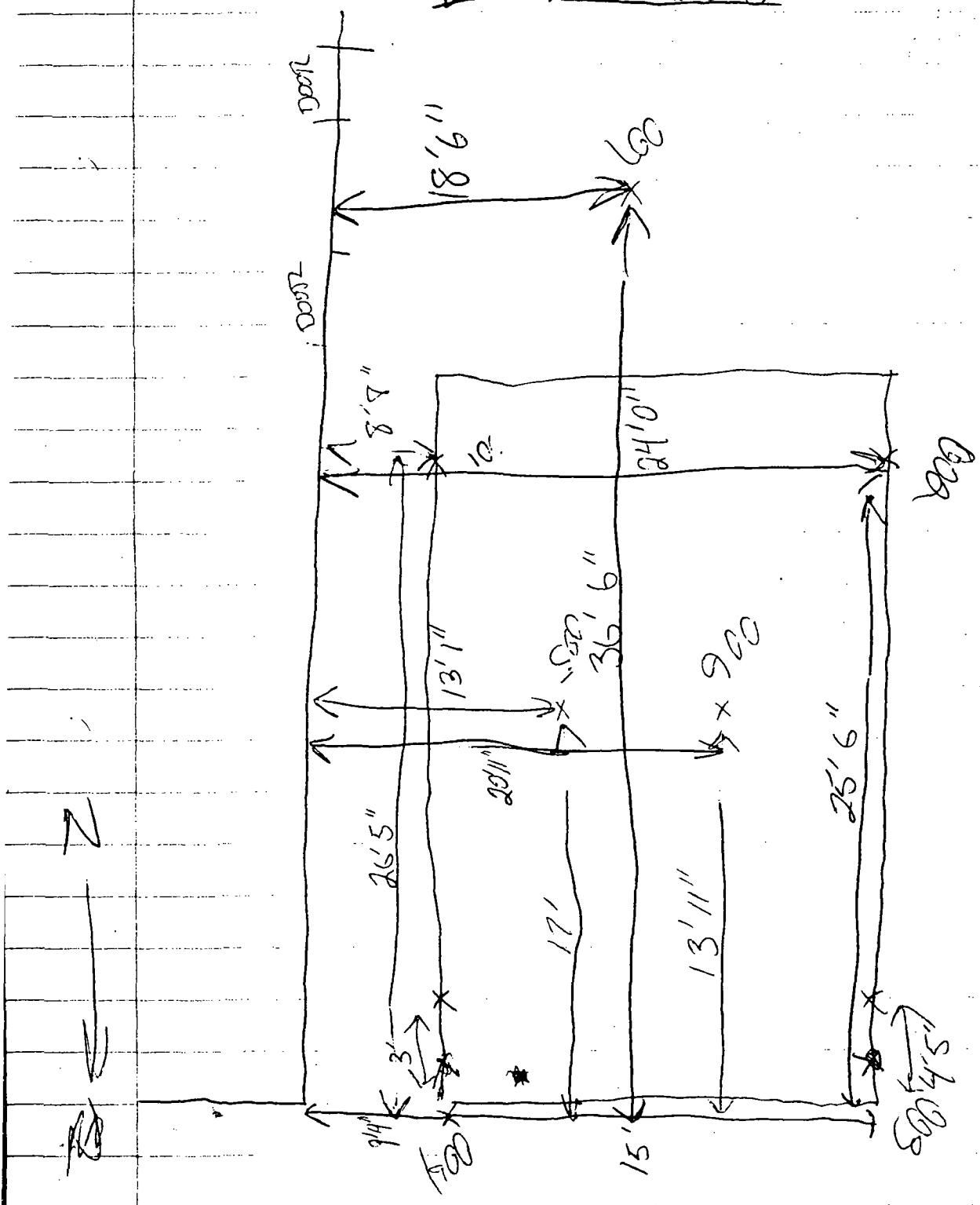
9-10-02 0630 CREW ON SITE, SAFETY AND OPTS MEETING

0700 FRONT END LOADER ON SITE. DRIVER SAYS HE WILL BE BACK IN HOUR 1/2 TO DROP OFF EXCAVATOR WITH THE BUCKET AND THE BREAKER

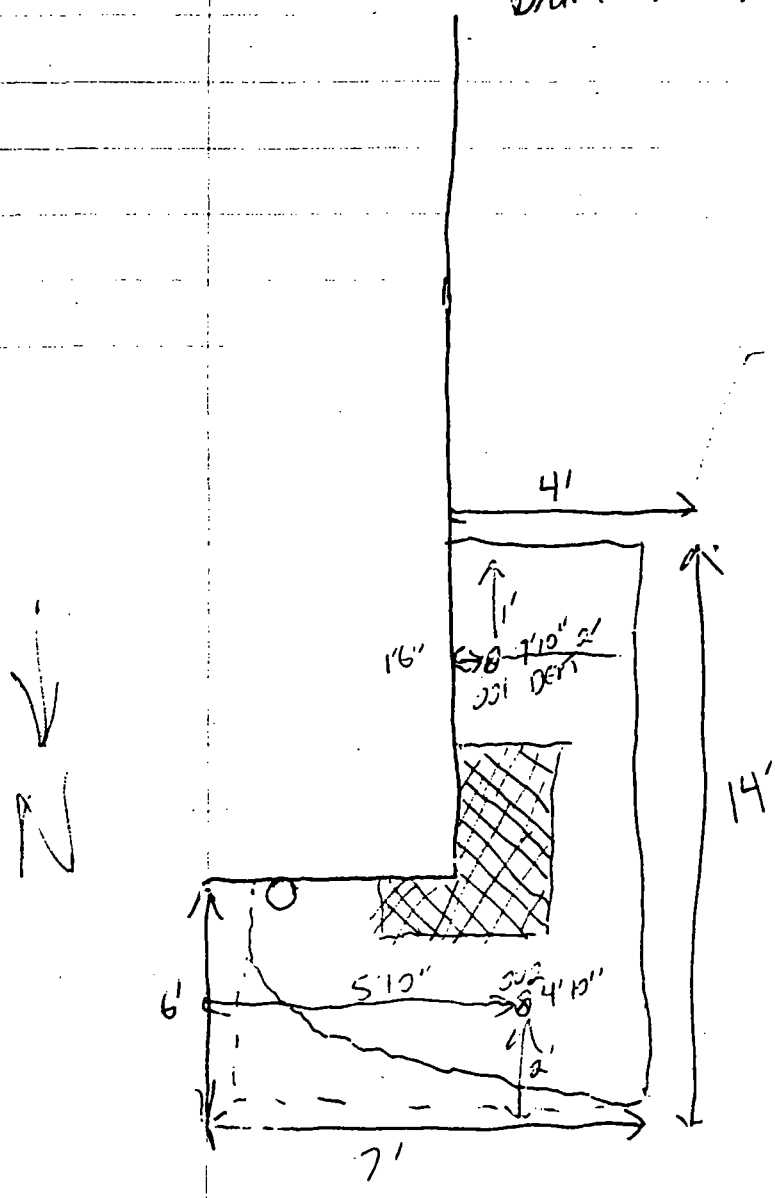
0800 CREW GAIN ACCESS TO BAY WHERE WE WILL DO THE CORING. TR CALLS JF TO DISCUSS LOCATION OF CORING POINTS. THE MAP INDICATES WERE THE PROXIMATE LOCATION BUT NOT EXTACT TR SUGGEST THAT WE MOVE BORING LOCATION 8" INCHES AWAY FROM WERE THE WALL OFF THE GREASE PIT WOULD BE

0830 TRACK HOE + PORT-A-JOHN ON SITE. DW BEGINS REMOVING.

Wash Rack area.



Drum Removal Area



C

ONYX

Zion Landfill
701 Green Bay Road
Zion, Illinois 60099

Weighmaster: SCALE OP 1
Ticket: 168776ZL
5 December 2002 7:53 am
5 December 2002 9:40 am
Vehicle: H3 02046 SUPEROIR
15

000485
R3 ENVIRONMENTAL MANAGEMENT
676 BONDED PARKWAY

Contract: N002658

Inbound - DISPOSAL CHARGE

Reference: 103089

OTHER COUNTIES

00 Gross Weight 80,160.00 LB
Tare Weight 43,740.00 LB
Net Weight 36,420.00 LB 18.21 TN

Quantity	Unit	Description	Rate	Total
18.21	TN	C4 [OT] C-Soil		

Net Amount:
Tendered:
Change:

I hereby certify that this load does not contain any unauthorized waste.

SIGNATURE: _____

Thank you for your business !!

ONYX NORTH AMERICA CORP.

ONYX

NON-HAZARDOUS SPECIAL WASTE MANIFEST

No. 103089

Section I **GENERATOR** (Generator completes all of Section I)

a. Generator Name: U.S. Army Corps of Engineers

b. Generating Location: Fort Dearborn

c. Address: 600 Martin L. King Jr. Place Drive
Louisville, KY 40202

d. Address: 6540 N. Mannheim Road
Rosemont, IL 60010

e. Phone No.: (502) 315-6327 Attn: Douglas Meadors

f. Phone No.: N/A

If owner of the generating facility differs from the generator, provide:

g. Owner's Name: N/A

h. Owner's Phone No.: N/A

i. Waste Profile No.: S-Z-L 02658

j. Description of Waste: Oil-Contaminated Soil

k. Quantity: 00015 Units: Y³ TYPE: T

TYPE	
DR	- DRUM
B	- BAG
BA	- 6 MIL. PLASTIC BAG or WRAP
T	- TRUCK
O	- OTHER

UNITS	
P	- POUNDS
Y	- YARDS
M³	- CUBIC METERS
Y³	- CUBIC YARDS
O	- OTHER

*GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; **AND, if the waste is a treatment residue of a previously restricted hazardous waste** subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

ON BEHALF OF THE DEPT OF DEFENSE

X Donald Mangialardo — Generator Authorized Agent Name

X Donald Mangialardo — Signature

Shipment Date: 120502

Section II **TRANSPORTER** (Generator completes a-d; Transporter I complete c-g; Transporter II complete h-n)

TRANSPORTER I	TRANSPORTER II
a. Name: Superior Special Services, Inc.	h. Name:
b. Address: 337 River Road Lemont, IL 60439	i. Address:
c. Driver Name/Title: Jeffy Welch (PRINT/TYPE)	j. Driver Name/Title: (PRINT/TYPE)
d. Phone No.: (630) 257-7540 e. Truck No.: 133244	k. Phone No.: l. Truck No.:
f. Vehicle License No./State: 60249 / WI	m. Vehicle License No./State:
Acknowledgement of Receipt of Materials.	Acknowledgement of Receipt of Materials.
g. Driver Signature — Shipment Date: 120502	n. Driver Signature — Shipment Date:

Section III **DESTINATION** (Generator completes a-d; destination site completes e-f)

a. Site Name: Onyx Zion Landfill

c. Phone No.: 847-731-5110

b. Physical Address: 701 Green Bay Rd.
Zion, IL 60099

d. Mailing Address: SAME

e. Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

f. Julie Robinson — Name of Authorized Agent

Signature

Receipt Date: 120502

* Shipper refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation, or both.

WHITE - Destination Retain CANARY - Return to Generator PINK - Transporter Retain GOLD - Generator Retain

ONYX

Zion Landfill
701 Green Bay Road
Zion, Illinois 60099

Weighmaster: SCALE OP 1
Ticket: 168825ZL
5 December 2002 10:17 am
5 December 2002 11:14 am
Vehicle: H5 32005 SUPERIOR LEMONT
15

000485
R3 ENVIRONMENTAL MANAGEMENT
676 BONDED PARKWAY

Contract: N002658

Inbound - DISPOSAL CHARGE

Reference: 103090

OTHER COUNTIES

DEC 0 9 2002

00 Gross Weight 60,620.00 LB
Tare Weight 30,440.00 LB
Net Weight 30,180.00 LB 15.09 TN

Quantity	Unit	Description	Rate	Total
15.09	TN	C4 [OT] C-Soil		

Net Amount:
Tendered:
Change:

I hereby certify that this load does not contain any unauthorized waste.

Thank you for your business !!

SIGNATURE: _____

ONYX NORTH AMERICA CORP.

ONYX

NON-HAZARDOUS SPECIAL WASTE MANIFEST

No. 103090

Section I — GENERATOR (Generator completes all of Section I)

a. Generator Name: U.S. Army Corps of Engineers

b. Generating Location: Fort Dearborn

c. Address: 600 Martin L. King Jr. Place Drive
Louisville, ~~IL~~ KY 40202

d. Address: 6540 N. Mannheim Road
Rosemont, IL 60010

e. Phone No.: (502) 315-6327 Attn: Douglas Meadors

f. Phone No.: N/A

If owner of the generating facility differs from the generator, provide:

g. Owner's Name: N/A

h. Owner's Phone No.: N/A

i. Waste Profile No.: SZL 02658

j. Description of Waste: Oil-Contaminated Soil

k. Quantity	Units	TYPE
0005	Y³	2

TYPE	
DR	- DRUM
B	- BAG
BA	- 6 MIL. PLASTIC BAG or WRAP
T	- TRUCK
O	- OTHER

UNITS	
P	- POUNDS
Y	- YARDS
M³	- CUBIC METERS
Y³	- CUBIC YARDS
O	- OTHER

*GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; **AND, if the waste is a treatment residue of a previously restricted hazardous waste** subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

ON BEHALF OF THE DEPT OF DEFENSE

X Donald Mangialardo — Generator Authorized Agent Name

X Donald Mangialardo — Signature

120502 — Shipment Date

Section II — TRANSPORTER (Generator completes a-d; Transporter I complete c-g, Transporter II complete h-n)

TRANSPORTER I

a. Name: Superior Special Services, Inc.

b. Address: 337 River Road
Lemont, IL 60439

c. Driver Name/Title: JIM PHELAN (PRINT/TYPE)

d. Phone No.: (630) 257-7540 e. Truck No.: H532-05

f. Vehicle License No./State: ~~[illegible]~~ M47144 WIS

Acknowledgement of Receipt of Materials.

g. X [signature] — Driver Signature

120502 — Shipment Date

TRANSPORTER II

h. Name:

i. Address:

j. Driver Name/Title: (PRINT/TYPE)

k. Phone No.: l. Truck No.:

m. Vehicle License No./State:

Acknowledgement of Receipt of Materials.

n. Driver Signature

Shipment Date

Section III — DESTINATION (Generator completes a-d; destination site completes e-f)

a. Site Name: Onyx Zion Landfill

c. Phone No.: 847-731-5110

b. Physical Address: 701 Green Bay Rd.
Zion, IL 60099

d. Mailing Address: SAME

e. Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

f. D. Garcia — Name of Authorized Agent

[signature] — Signature

Receipt Date

* Shipper refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation, or both.

WHITE - Destination Retain | CANARY - Return to Generator | PINK - Transporter Retain | GOLD - Generator Retain

ONYX

Zion Landfill
701 Green Bay Road
Zion, Illinois 60099

Weighmaster: SCALE OP 1
Ticket: 168885ZL
5 December 2002 12:16 pm
5 December 2002 12:58 pm
Vehicle: H3 02046 SUPEROIR
15

000485
R3 ENVIRONMENTAL MANAGEMENT
676 BONDED PARKWAY

Contract: N002658

Inbound - DISPOSAL CHARGE

Reference: 103091

OTHER COUNTIES

00 Gross Weight 74,720.00 LB
Tare Weight 44,600.00 LB
Net Weight 30,120.00 LB 15.06 TN

Quantity	Unit	Description	Rate	Total
15.06	TN	C4 [OT] C-Soil		

Net Amount:
Tendered:
Change:

I hereby certify that this load does not contain any unauthorized waste.

Thank you for your business !!

SIGNATURE: _____

ONYX NORTH AMERICA CORP.

ONYX

NON-HAZARDOUS SPECIAL WASTE MANIFEST

No. 103091

Section I — GENERATOR (Generator completes all of Section I)

a. Generator Name: ~~U/~~ U.S. Army Corps of Engineers

b. Generating Location: Fort Dearborn

c. Address: 600 Martin L. King Jr. Place Drive
Louisville, KY 40202

d. Address: 5540 N. Mannheim Road
Rosemont, IL 60010

e. Phone No.: (502) 315-6327 Attn: Douglas Meadors

f. Phone No.: N/A

If owner of the generating facility differs from the generator, provide:

g. Owner's Name: N/A

h. Owner's Phone No.: N/A

i. Waste Profile No.: SZL 02658

j. Description of Waste: Oil-Contaminated Soil

k. Quantity: 00015 Units: Y³ TYPE: T

TYPE	
DR	- DRUM
B	- BAG
BA	- 6 MIL. PLASTIC BAG or WRAP
T	- TRUCK
O	- OTHER

UNITS	
P	- POUNDS
Y	- YARDS
M³	- CUBIC METERS
Y³	- CUBIC YARDS
O	- OTHER

*GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; **AND, if the waste is a treatment residue of a previously restricted hazardous waste** subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

ON BEHALF OF THE DEPT OF DEFENSE

X DONALD MANGIALARDO — Generator Authorized Agent Name

X Donald Mangialardo — Signature

120502 — Shipment Date

Section II — TRANSPORTER (Generator completes a-d; Transporter I complete c-g; Transporter II complete h-n)

TRANSPORTER I

a. Name: Superior Special Services, Inc.

b. Address: 337 River Road
Lemont, IL 60439

c. Driver Name/Title: Terry Ivelle (PRINT/TYPE)

d. Phone No.: (630) 257-7540 e. Truck No.:

f. Vehicle License No./State: 62419 WNT

Acknowledgement of Receipt of Materials.

g. X [signature] — Driver Signature

120502 — Shipment Date

TRANSPORTER II

h. Name:

i. Address:

j. Driver Name/Title: (PRINT/TYPE)

k. Phone No.: l. Truck No.:

m. Vehicle License No./State:

Acknowledgement of Receipt of Materials.

n. Driver Signature

Shipment Date

Section III — DESTINATION (Generator completes a-d; destination site completes e-f)

a. Site Name: Onyx Zion Landfill

c. Phone No.: 847-731-5110

b. Physical Address: 701 Green Bay Rd.
Zion, IL 60099

d. Mailing Address: SAME

e. Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

f. [signature] — Name of Authorized Agent

[signature] — Signature

Receipt Date

* Shipper refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation, or both.

WHITE - Destination Retain CANARY - Return to Generator PINK - Transporter Retain GOLD - Generator Retain

ONYX

Zion Landfill
701 Green Bay Road
Zion, Illinois 60099

Weighmaster: SCALE OP 1
Ticket: 168984ZL
5 December 2002 4:00 pm
5 December 2002 4:06 pm
Vehicle: H3 02046 SUPEROIR
15

000485
R3 ENVIRONMENTAL MANAGEMENT
676 BONDED PARKWAY

Contract: N002658

Inbound - DISPOSAL CHARGE

Reference: 103092

OTHER COUNTIES

01 Gross Weight 88,860.00 LB
Tare Weight 44,100.00 LB
Net Weight 44,760.00 LB 22.38 TN

Quantity	Unit	Description	Rate	Total
22.38	TN	C4 [OT] C-Soil		

Net Amount:
Tendered:
Change:

I hereby certify that this load does not contain any unauthorized waste.

SIGNATURE: _____

Thank you for your business !!

ONYX NORTH AMERICA CORP.

ONYX

NON-HAZARDOUS SPECIAL WASTE MANIFEST

No. 103092

Section I GENERATOR (Generator completes all of Section I)

a. Generator Name: U.S. Army Corps of Engineers

b. Generating Location: Fort Dearborn

c. Address: 600 Martin L. King Jr. Place Drive
Louisville, KY 40202

d. Address: 6540 N. Mannheim Road
Rosemont, IL 60010

e. Phone No.: (502) 315-6327 Attn: Douglas Meadors

f. Phone No.: N/A

If owner of the generating facility differs from the generator, provide:

g. Owner's Name: N/A

h. Owner's Phc No.: N/A

i. Waste Profile No.: SZL 02658

j. Description of Waste: Oil-Contaminated Soil

k. Quantity: 00015 Units: Y³ TYPE: T

TYPE	
DR	- DRUM
B	- BAG
BA	- 6 MIL. PLASTIC BAG or WRAP
T	- TRUCK
O	- OTHER

UNITS	
P	- POUNDS
Y	- YARDS
M³	- CUBIC METERS
Y³	- CUBIC YARDS
O	- OTHER

*GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; **AND, if the waste is a treatment residue of a previously restricted hazardous waste** subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

ON BEHALF OF THE DEPT OF DEFENSE

DONALD MANGIALARDO — Generator Authorized Agent Name

Signature

Shipment Date: 120507

Section II TRANSPORTER (Generator completes a-d; Transporter I complete c-g, Transporter II complete h-n)

TRANSPORTER I

a. Name: Superior Special Services, Inc.

b. Address: 337 River Road
Lemont, IL 60439

c. Driver Name/Title: Temuella Driver (PRINT/TYPE)

d. Phone No.: (630) 257-7540 e. Truck No.: 1302246

f. Vehicle License No./State: 60249 WIS

Acknowledgement of Receipt of Materials.

g. Driver Signature

Shipment Date: 120507

TRANSPORTER II

h. Name:

i. Address:

j. Driver Name/Title: (PRINT/TYPE)

k. Phone No.: l. Truck No.:

m. Vehicle License No./State:

Acknowledgement of Receipt of Materials.

n. Driver Signature

Shipment Date

Section III DESTINATION (Generator completes a-d; destination site completes e-f)

a. Site Name: Onyx Zion Landfill

c. Phone No.: 847-731-5110

b. Physical Address: 701 Green Bay Rd.
Zion, IL 60099

d. Mailing Address: SAME

e. Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

f. D Garcia — Name of Authorized Agent

Signature

Receipt Date: 120507

* Shipper refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation, or both.

WHITE - Destination Retain | CANARY - Return to Generator | PINK - Transporter Retain | GOLD - Generator Retain

Zion Landfill
701 Green Bay Road
Zion, Illinois 60099

Weighmaster: SCALE OP 3
Ticket: 171668ZL
19 December 2002 10:21 am
19 December 2002 10:53 am
Vehicle: H5 32005 SUPERIOR LEMONT
15

000485
R3 ENVIRONMENTAL MANAGEMENT
676 BONDED PARKWAY

Contract: N002658

Inbound - DISPOSAL CHARGE

Reference: 103093

OTHER COUNTIES

00 Gross Weight 51,800.00 LB
Tare Weight 30,960.00 LB
Net Weight 20,840.00 LB 10.42 TN

Quantity	Unit	Description	Rate	Total
10.42	TN	C4 [OT] C-Soil		

Net Amount:
Tendered:
Change:

I hereby certify that this load does not contain any unauthorized waste.

SIGNATURE:

Thank you for your business !!

ONYX NORTH AMERICA CORP.

ONYX

NON-HAZARDOUS SPECIAL WASTE MANIFEST

No. 103093

Section I — GENERATOR (Generator completes all of Section I)

a. Generator Name: U.S. Army Corps of Engineers

b. Generating Location: Fort Dearborn

c. Address: 600 Martin L. King Jr. Place Drive
Louisville, KY 40202

d. Address: 6540 N. Mannheim Road
Rosemont, IL 60010

e. Phone No. (502) 315-6327 Attn: Douglas Meadors

f. Phone No.: N/A

If owner of the generating facility differs from the generator, provide:

g. Owner's Name: N/A

h. Owner's Phone No.: N/A

i. Waste Profile No.: SZL 02658

j. Description of Waste: Oil-Contaminated Soil

k. Quantity: 00015 Units: Y³ TYPE: P

TYPE	
DR	- DRUM
B	- BAG
BA	- 6 MIL. PLASTIC BAG or WRAP
T	- TRUCK
O	- OTHER

UNITS	
P	- POUNDS
Y	- YARDS
M³	- CUBIC METERS
Y³	- CUBIC YARDS
O	- OTHER

*GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; **AND, if the waste is a treatment residue of a previously restricted hazardous waste** subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

ON BEHALF OF THE DEPT OF DEFENSE

X DONALD MANGIALARDO — Generator Authorized Agent Name

X Donald Mangialardo — Signature

120502 — Shipment Date

Section II — TRANSPORTER (Generator completes a-d; Transporter I complete c-g, Transporter II complete h-n)

TRANSPORTER I

a. Name: Superior Special Services, Inc.

b. Address: 337 River Road
Lemont, IL 60439

c. Driver Name/Title: William Horrell / Driver (PRINT/TYPE)

d. Phone No.: (630) 257-7540 e. Truck No.: 32005

f. Vehicle License No./State:

Acknowledgement of Receipt of Materials.

g. Driver Signature — Shipment Date: 1/7/97

TRANSPORTER II

h. Name:

i. Address:

j. Driver Name/Title:

k. Phone No.: (PRINT/TYPE) l. Truck No.:

m. Vehicle License No./State:

Acknowledgement of Receipt of Materials.

n. Driver Signature — Shipment Date

Section III — DESTINATION (Generator completes a-d; destination site completes e-f)

a. Site Name: Onyx Zion Landfill

c. Phone No.: 847-731-5110

b. Physical Address: 701 Green Bay Rd.
Zion, IL 60099

d. Mailing Address: SAME

e. Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

f. Name of Authorized Agent — Signature — Receipt Date: 1/10

* Shipper refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation, or both.

WHITE - Destination Retain CANARY - Return to Generator PINK - Transporter Retain GOLD - Generator Retain

THE NATION'S LEADING PRODUCER OF CONSTRUCTION AGGREGATES

737997

130150

Vulcan Materials Company

Midwest Division, Vulcan Construction Materials, LP
747 East 22nd Street • Lombard, IL 60148

SHIPPING LOCATION: VULCAN MATERIALS / BUSSE
1520-1700 MIDWAY COURT
ELK GROVE VILLAGE, IL

BY SIGNING BELOW, TRANSPORTERS OF MATERIAL INTO VULCAN PROPERTY AGREE TO THE CONDITIONS ON THE REVERSE SIDE.

CARRIER	RECEIVED BY

DATE	TIME	PLANT	
12/04/02	00:35	ELK GROVE DUM	737997

CUSTOMER NO. 0999116 CASH2 SALES ORDER NO. 991162 2

CASH SALE
CASH SALES DEPT 116 LOADS
NON-TAXABLE TODAY
RS ENVIRONMENTAL
SHIP TO CK NO 10363 1

HAULER	TRUCK NO.	DELIVERY TYPE
999 CUSTOMER PICK	CASH2	PICKED UP

PRODUCT	CUSTOMER P.O. NO.
030 CONC DUMP SCMT	

GROSS	TARE	NET	NET TONS	WEIGHER
				LG

COMMENTS: 1.00 LOADS OR UNITS
1.00 TODAY

M=Man. W.C. CASH SALE ONLY 1=Scale 1

ENVIRONMENTAL MANAGEMENT INC.

This Shipping Order must be legibly filled in, in ink, in indelible Pencil, or in Carbon, and retained by the Agent

Shipper No.

Carrier No.

Page 1 of 1

Superior Special Services, Inc.
(Name of Carrier)

Date 12-4-02

To:	From:
Consignee Vulcan Materials Company	**Shipper** U.S. Army Corps of Engineers - Fort Dearborn
Street 1520 Midway Court	**Street** 6540 North Mannheim Road
City Elk Grove Village **State** IL **Zip Code** 60007	**City** Rosemont **State** IL **Zip Code** 60010
	24 hour Emergency Phone # N/A

Route

Vehicle Number 20-007

No. of units & Container Type	HM	Basic Description Proper Shipping Name, Hazard Class, UN or NA Number, Packing Group	Total Quantity (Weight, Volume, Gallons, etc.)	Weight (Subject to Correction)	Rate
1xRO	-	Non-R.C.R.A./Non-D.O.T. Regulated Material (Concrete, Debris)	15 cy		

Placards Tendered: Yes ☐ **No** ☒

Remit C.O.D. TO:
Address

Freight Charges

Freight Prepaid Except when box at right is checked

Check box if charges are to be collect ☐

RECEIVED, subject to the classification and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading, the property descried above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its rout, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment. Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Shipper U.S. Army Corps of Engineers	**Carrier** Superior Special Services, Inc.
Signature [illegible] RINEBOLT FHI	**Signature** [illegible]
Date 12-4-02	**Date** 12-4-2

THE NATION'S LEADING PRODUCER OF CONSTRUCTION AGGREGATES

737998

Vulcan Materials Company

Midwest Division, Vulcan Construction Materials, LP
747 East 22nd Street • Lombard, IL 60148

SHIPPING LOCATION: VULCAN MATERIALS / BUSSE
1500-1700 MIDWAY COURT
ELK GROVE VILLAGE, IL

BY SIGNING BELOW, TRANSPORTERS OF MATERIAL INTO VULCAN PROPERTY AGREE TO THE CONDITIONS ON THE REVERSE SIDE.

CARRIER	RECEIVED BY

DATE	TIME	PLANT	
12/04/02	08:30	ELK GROVE DUM	737998

CUSTOMER NO. 0000116 CASH2 SALES ORDER NO. 991162 2

CASH SALE
CASH SALES DEPT 116 LOADS
NON-TAXABLE TODAY
R3 ENVIRONMENTAL
SHIP TO CK NO 10363 1

HAULER	TRUCK NO.	DELIVERY TYPE
999 CUSTOMER PICK-	CASH2	PICKED UP

PRODUCT	CUSTOMER P.O. NO.
951 CONC DUMP-GWH	

GROSS	TARE	NET	NET TONS	WEIGHER
				LC

COMMENTS: 1.00 LOADS OR UNITS
1.00 TODAY

M=Man.Wt. CASH SALE ONLY 1=Scale 1

ENVIRONMENTAL MANAGEMENT, INC.

This Shipping Order must be legibly filled in, in ink, in indelible Pencil, or in Carbon, and retained by the Agent

Shipper No.

Carrier No.

Page 1 of 1

Superior Special Services, Inc.
(Name of Carrier)

Date 12-4-02

To:	From:
Consignee Vulcan Materials Company	**Shipper** U.S. Army Corps of Engineers - Fort Dearborn
Street 1520 Midway Court	**Street** 6540 North Mannheim Road
City Elk Grove Village **State** IL **Zip Code** 60007	**City** Rosemont **State** IL **Zip Code** 60010
	24 hour Emergency Phone # N/A

Route

Vehicle Number 20-013

No. of units & Container Type	HM	Basic Description Proper Shipping Name, Hazard Class, UN or NA Number, Packing Group	Total Quantity (Weight, Volume, Gallons, etc.)	Weight (Subject to Correction)	Rate
1-RO		Non-R.C.R.A./Non-D.O.T. Regulated Material (Concrete, Debris)	15 cy		

Placards Tendered: Yes ☐ **No** ☒

Remit C.O.D. TO:
Address

Freight Charges

Freight Prepaid Except when box at right is checked

Check box if charges are to be collect ☐

RECEIVED, subject to the classification and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading, the property descried above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its rout, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment. Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Shipper U.S. Army Corps of Engineers	**Carrier** Superior Special Services, Inc.
Signature RINEBOLT	**Signature**
Date 12-4-02	**Date** 12-04-02

THE NATION'S LEADING PRODUCER OF CONSTRUCTION AGGREGATES

738012

Vulcan Materials Company

Midwest Division, Vulcan Construction Materials, LP
747 East 22nd Street • Lombard, IL 60148

SHIPPING LOCATION: VULCAN MATERIALS / DUSSE
1520-1700 MIDWAY COURT
ELK GROVE VILLAGE, IL

BY SIGNING BELOW, TRANSPORTERS OF MATERIAL INTO VULCAN PROPERTY AGREE TO THE CONDITIONS ON THE REVERSE SIDE.

CARRIER	RECEIVED BY

DATE	TIME	PLANT	
12/04/02	10:25	ELK GROVE DUM	738012

CUSTOMER NO. 0990116 CASH2 SALES ORDER NO. 991162 2

CASH SALE
CASH SALES DEPT 116 LOADS
NON-TAXABLE TODAY
R3 ENVIRONMENTAL
SHIP TO DI NO 10363 2

HAULER	TRUCK NO.	DELIVERY TYPE
999 CUSTOMER PICK	CASH2	PICKED UP

PRODUCT	CUSTOMER P.O. NO.
030 CONC DUMP-SEMI	

GROSS	TARE	NET	NET TONS	WEIGHER
				LC

COMMENTS: 1.00 LOADS OR UNITS
2.00 TODAY

M=Man.Wt. CASH SALE ONLY 1=Scale 1

ENVIRONMENTAL MANAGEMENT INC. L

This Shipping Order must be legibly filled in, in ink, in indelible Pencil, or in Carbon, and retained by the Agent

Shipper No.

Carrier No.

Page 1 of 1

Superior Special Services, Inc.
(Name of Carrier)

Date 12-4-02

To:	From:
Consignee Vulcan Materials Company	**Shipper** U.S. Army Corps of Engineers - Fort Dearborn
Street 1520 Midway Court	**Street** 6540 North Mannheim Road
City Elk Grove Village **State** IL **Zip Code** 60007	**City** Rosemont **State** IL **Zip Code** 60010
	24 hour Emergency Phone # N/A

Route

Vehicle Number Baker R25353.

No. of units & Container Type	HM	Basic Description Proper Shipping Name, Hazard Class, UN or NA Number, Packing Group	Total Quantity (Weight, Volume, Gallons, etc.)	Weight (Subject to Correction)	Rate
1 CM		Non-R.C.R.A./Non-D.O.T. Regulated Material (Concrete, Debris)	15 y3		

Placards Tendered: Yes ☐ **No** ☒

Remit C.O.D. TO:
Address

Freight Charges

Freight Prepaid Except when box at right is checked

Check box if charges are to be collect ☐

RECEIVED, subject to the classification and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading, the property descried above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its rout, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment. Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Shipper U.S. Army Corps of Engineers	**Carrier** Superior Special Services, Inc.
Signature X [signature] FIREBOAT FHI	**Signature** X [signature]
Date X 12-04-02	**Date** X 12-4-2

THE NATION'S LEADING PRODUCER OF CONSTRUCTION AGGREGATES

738025

Vulcan Materials Company

Midwest Division, Vulcan Construction Materials, LP
747 East 22nd Street • Lombard, IL 60148

SHIPPING LOCATION: VULCAN MATERIALS / BUSSE
1520-1700 MIDWAY COURT
ELK GROVE VILLAGE, IL

BY SIGNING BELOW, TRANSPORTERS OF MATERIAL INTO VULCAN PROPERTY AGREE TO THE CONDITIONS ON THE REVERSE SIDE.

CARRIER	RECEIVED BY

DATE	TIME	PLANT	
12/04/02	12:40	ELK GROVE DUM	738025

CUSTOMER NO. 0000116 CASH2 SALES ORDER NO. 991162 2

CASH SALE
CASH SALES DEPT 116 LOADS
NON-TAXABLE TODAY
R3 ENVIRONMENTAL
SHIP TO CK NO 10363 3

HAULER	TRUCK NO.	DELIVERY TYPE
399 CUSTOMER PICK-	CASH2	PICKED UP

PRODUCT	CUSTOMER P.O. NO.
030 CONC DUMP-SEMI	

GROSS	TARE	NET	NET TONS	WEIGHER
				LE

COMMENTS: 1.00 LOADS OR UNITS
3.00 TODAY

M-Man.Ut. CASH SALE ONLY I-Scal 1

ENVIRONMENTAL MANAGEMENT INC.

This Shipping Order must be legibly filled in, in ink, in indelible Pencil, or in Carbon, and retained by the Agent

Shipper No.

Carrier No.

Page 1 of 1

Superior Special Services, Inc.
(Name of Carrier)

Date 12-4-02

To:	From:
Consignee Vulcan Materials Company	**Shipper** U.S. Army Corps of Engineers - Fort Dearborn
Street 1520 Midway Court	**Street** 6540 North Mannheim Road
City Elk Grove Village **State** IL **Zip Code** 60007	**City** Rosemont **State** IL **Zip Code** 60010
	24 hour Emergency Phone # N/A

Route

Vehicle Number 20-004

No. of units & Container Type	HM	Basic Description Proper Shipping Name, Hazard Class, UN or NA Number, Packing Group	Total Quantity (Weight, Volume, Gallons, etc.)	Weight (Subject to Correction)	Rate
1 cm		Non-R.C.R.A./Non-D.O.T. Regulated Material (Concrete, Debris)	15 Y3		

Placards Tendered: Yes ☐ **No** ☒

Remit C.O.D. TO:
Address

Freight Charges

Freight Prepaid Except when box at right is checked

Check box if charges are to be collect ☐

RECEIVED, subject to the classification and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading, the property descried above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its rout, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment. Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Shipper U.S. Army Corps of Engineers	**Carrier** Superior Special Services, Inc.
Signature X	**Signature** X
Date X 12-4-02	**Date** X 12-4-2

THE NATION'S LEADING PRODUCER OF CONSTRUCTION AGGREGATES

737947

Vulcan Materials Company

Midwest Division, Vulcan Construction Materials, LP
747 East 22nd Street • Lombard, IL 60148

SHIPPING LOCATION: VULCAN MATERIALS / BUSSE
1520-1700 MIDWAY COURT
ELK GROVE VILLAGE, IL

BY SIGNING BELOW, TRANSPORTERS OF MATERIAL INTO VULCAN PROPERTY AGREE TO THE CONDITIONS ON THE REVERSE SIDE.

CARRIER	RECEIVED BY

DATE	TIME	PLANT	
12/03/02	09:15	ELK GROVE DUM	737947

CUSTOMER NO. 0999116 CASH2 SALES ORDER NO. 091162 2

CASH SALE

CASH SALES DEPT 116 LOADS
NON-TAXABLE TODAY
R3 ENVIRONMENTAL
SHIP TO CF NO 10363 1

HAULER	TRUCK NO.	DELIVERY TYPE
999 CUSTOMER PICK	CASH2	PICKED UP

PRODUCT	CUSTOMER P.O. NO.
030 CONC DUMP-SEMI	

GROSS	TARE	NET	NET TONS	WEIGHER

COMMENTS: 1.00 LOADS OR UNITS
1.00 TODAY

McHenry, IL. CASH SALE ONLY 1=Scale 1

ENVIRONMENTAL MANAGEMENT INC.

This Shipping Order must be legibly filled in, in ink, in indelible Pencil, or in Carbon, and retained by the Agent

Shipper No.

Carrier No.

Page 1 of 1

Superior Special Services, Inc.
(Name of Carrier)

Date 12-3-02

To:	From:
Consignee Vulcan Materials Company	**Shipper** U.S. Army Corps of Engineers - Fort Dearborn
Street 1520 Midway Court	**Street** 6540 North Mannheim Road
City Elk Grove Village **State** IL **Zip Code** 60007	**City** Rosemont **State** IL **Zip Code** 60010
	24 hour Emergency Phone # N/A

Route

Vehicle Number 20-006

No. of units & Container Type	HM	Basic Description Proper Shipping Name, Hazard Class, UN or NA Number, Packing Group	Total Quantity (Weight, Volume, Gallons, etc.)	Weight (Subject to Correction)	Rate
1		Non-R.C.R.A./Non-D.O.T. Regulated Material (Concrete, Debris)	~~[illegible]~~		
			15 yd.		

Placards Tendered: Yes ☐ No ☒

Remit C.O.D. TO:
Address

Freight Charges

Freight Prepaid Except when box at right is checked

Check box if charges are to be collect ☐

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Shipper U.S. Army Corps of Engineers	**Carrier** Superior Special Services, Inc.
Signature Tom Rinebert CHF	**Signature**
Date 12-3-02	**Date** 12-3-2

ENVIRONMENTAL MANAGEMENT INC.

is Shipping Order must be legibly filled in, in ink, in indelible Pencil, or in Carbon, and retained by the Agent

Shipper No.

Carrier No.

Page 1 of 1

Superior Special Services, Inc.
(Name of Carrier)

Date 12-3-02

To:	From:
Consignee Vulcan Materials Company	**Shipper** U.S. Army Corps of Engineers - Fort Dearborn
Street 1520 Midway Court	**Street** 6540 North Mannheim Road
City Elk Grove Village **State** IL **Zip Code** 60007	**City** Rosemont **State** IL **Zip Code** 60010
	24 hour Emergency Phone # N/A

Route

Vehicle Number R25239RT

No. of units & Container Type	HM	Basic Description Proper Shipping Name, Hazard Class, UN or NA Number, Packing Group	Total Quantity (Weight, Volume, Gallons, etc.)	Weight (Subject to Correction)	Rate
1-20	–	Non-R.C.R.A./Non-D.O.T. Regulated Material (Concrete, Debris)	15 cy		

Placards Tendered: Yes ☐ **No** ☒

Remit C.O.D. TO: Address

Freight Charges

Freight Prepaid Except when box at right is checked

Check box if charges are to be collect ☐

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Shipper U.S. Army Corps of Engineers	**Carrier** Superior Special Services, Inc.
Signature Tom Rinebolt AIF	**Signature** [illegible]
Date 12-03-02	**Date** 12-03-02

STATE OF ILLINOIS

P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761

State Form LPC 62 8/81 IL532-0610

FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE

PLEASE TYPE (Form designed for use on elite (12-pitch) typewriter.) EPA Form 8700-22 (Rev. 6-89) Form Approved. OMB No. 2050-0039

UNIFORM [redacted] WASTE MANIFEST

1. Generator's US EPA ID No.: N/A
Manifest Document No.: 0 2 2 3 9
2. Page 1 of 1
Information in the shaded areas is not required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address c/o Doug Madors If Different
U.S. Army Corps of Engineers
600 M.L. King Jr. Place Drive
Louisville, KY 40202
Fort Dearborn
6540 N. Mannheim Road
Rosemont, IL 60010

A. Illinois Manifest Document Number: IL1U455700 FEE PAID IF APPLICA
B. Generator's IL ID Number: 0 3 1 2 7 6 5 0 7 9

4. *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS* (800) 235-1344

5. Transporter 1 Company Name: A & C # Environmental, Inc.
6. US EPA ID Number: I L R 0 0 0 0 2 8 9 9 3
C. Transporter's ID Number: UPW-0571694-IL
D. Transporter's Phone: (815) 464-5344

7. Transporter 2 Company Name
8. US EPA ID Number
E. Transporter's ID Number
F. Transporter's Phone ( )

9. Designated Facility Name and Site Address
City of Crest Hill
1610 Plainfield Road
Crest Hill, IL 60435
10. US EPA ID Number: N/A
G. Facility's IL ID Number: 1 9 7 0 2 5 3 0 0 1
H. Facility's Phone: (815) 723-6900

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Non-Hazardous Special Waste (Separator Water)	001	TT	00650	G	EPA HW Number NONE
b.					EPA HW Number
c.					EPA HW Number
d.					EPA HW Number

J. Additional Description for Materials Listed Above

K. Handling Codes for Wastes Listed Above In Item #14

15. Special Handling Instructions and Additional Information
Generator's Phone: (502) 315-6327 Attn: Doug Madors
Bill to R3 Environmental Management, Inc.
EMERGENCY phone # 800-235-1344

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

ON BEHALF OF THE DEPT OF DEFENSE

Printed/Typed Name: X DONALD MAUGIALARDO
Signature: X Donald Maugialardo
Date: Month Day Year: X 1 2 0 3 0 2

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: THOMAS C GRAY
Signature:
Date: Month Day Year: 1 2 0 3 0 2

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of [redacted] materials covered by this manifest except as noted in item 19.
Printed/Typed Name: John Roberts
Signature: John Roberts
Date: Month Day Year: 1 2 0 3 0 2

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 1. TSD MAIL TO GENERATOR

In case of a spill call the Illinois Office of Emergency Response at 217/782-7860 and the National Response Center at 800/424-8802 or 202/426-2675.

STATE OF ILLINOIS

ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL

P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761

FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE

State Form LPC 62 8/81 IL532-0610

PLEASE TYPE (Form designed for use on elite (12-pitch) typewriter.) EPA Form 8700-22 (Rev. 6-89) Form Approved. OMB No. 2050-0039

UNIFORM [redacted] WASTE MANIFEST

1. Generator's US EPA ID No.: N/A
Manifest Document No.: 0 2 2 6 4
2. Page 1 of 1
Information in the shaded areas is not required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address
U.S. Army Corps of Engineers
600 M. L. King Jr. Place Drive
Louisville, KY 40202

Location If Different
Fort Dearborn
6540 N. Mannheim Road
Rosemont, IL 60010

A. Illinois Manifest Document Number: IL10455771 FEE PAID IF APPLICABLE
B. Generator's IL ID Number: 0 3 1 2 7 5 5 0 7 9

4. *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS* N/A

5. Transporter 1 Company Name: A & C Environmental, Inc.
6. US EPA ID Number: I L R 0 0 0 0 2 8 9 9 3
C. Transporter's ID Number: UPW-0571694-IL
D. Transporter's Phone: (815) 464-5344

7. Transporter 2 Company Name
8. US EPA ID Number
E. Transporter's ID Number
F. Transporter's Phone ( )

9. Designated Facility Name and Site Address
City of Crest Hill
1610 Plainfield Road
Crest Hill, IL 60435
10. US EPA ID Number: N/A
G. Facility's IL ID Number: 1 9 7 0 2 5 3 0 0 1
H. Facility's Phone: (815) 723-6900

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Non-Hazardous Special Waste (Separator Water)	001	TT	00140	G	EPA HW Number NONE
b.					EPA HW Number
c.					EPA HW Number
d.					EPA HW Number

J. Additional Description for Materials Listed Above
11a.

K. Handling Codes for Wastes Listed Above in Item #14

15. Special Handling Instructions and Additional Information
Generator's Phone: (502) 315-6327 Attn: Douglas Meadors
Bill to R3 Environmental Management, Inc.
FHI -- 24 HOUR EMERGENCY RESPONSE HOTLINE -- (800) 235-1344

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

ON BEHALF OF THE DEPT OF DEFENSE

Printed/Typed Name: X DONALD MANGIALARDO
Signature: X Donald Mangialardo
Date: Month Day Year X 1 2 1 2 0 2

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: THOMAS C. GRAD
Signature:
Date: Month Day Year 1 2 1 2 0 2

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of ~~hazardous~~ materials covered by this manifest except as noted in item 19.
Printed/Typed Name: John Roberts
Signature: John Roberts
Date: Month Day Year 1 2 1 2 0 2

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 1. TSD MAIL TO GENERATOR

In case of a spill call the Illinois Office of Emergency Response at 217/782-7860 and the National Response Center at 800/424-8802 or 202/426-2675.

D

ORGANIC ANALYSIS DATA PACKAGE

ontract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301100 Samples Received at ARDL: 9/12/02

CASE NARRATIVE

VOLATILE FRACTION - METHOD 8260

Water and soil samples were received by ARDL, Inc. on September 12, 2002,for 8260 analysis by GC/MS. All analyses were performed within the method specified holding time.

Sample 301100-04 (FIP-003-06-SSS) failed the third internal standard area, but could not be repeated since the sample was depleted. Therefore, the results were reported as is.

On the chromatograms, the injected date stamp appears as "**" instead of "02" for the year 2002. The quantitation date stamp is correct and accurately represents the year of the injection date.

No additional problems were encountered during the sample analyses.

SEMIVOLATILE FRACTION - METHOD 8270

oil and water samples were received by ARDL, Inc. on September 12, 2002, for BNA analysis by GC/MS. The analyses were performed according to low level protocol within method specified holding times.

There was insufficient sample volume to perform a matrix spike and matrix spike duplicate evaluation for this site for the water sample. Two spiked blanks were extracted and analyzed for QC purposes.

The soil spiked blank and soil MS/MSD all exhibited high 4-Nitrophenol recovery. None of the samples contained this target, therefore, no further action was needed. In addition, 1,4-Dichlorobenzene was low in the MSD. The spiked blank was acceptable. Low recovery attributed to the sample matrix, no further action needed.

Sample FFIP-002-06-SSS had an internal standard recovery failure. The sample was re-analyzed with the failure being repeated. Results of the re-analysis are found on QC summary forms 2,4 and 8 only.

No other unusual problems were encountered during the sample extraction or sample analyses.

PNA/SIM FRACTION

Soil and water samples were received by ARDL, Inc. on September 12, 2002, for PNA-SIM analysis by GC/MS. The analyses were performed according to low evel protocol within method specified holding times.

There was insufficient sample volume to perform a matrix spike and matrix spike duplicate evaluation for this site for the water sample. Two spiked blanks were extracted and analyzed for QC purposes.

ORGANIC ANALYSIS DATA PACKAGE

Contract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301100 Samples Received at ARDL: 9/12/02

CASE NARRATIVE (Continued)

PNA/SIM FRACTION (Continued)

No other unusual problems were encountered during the samples extraction or sample analysis.

PCB FRACTION - METHOD 8082

Soil and water samples were received by ARDL, Inc. on September 12, 2002, for PCB analysis. The samples were extracted within holding time requirements.

The soil samples were cleaned up using acid hydrolysis.

The columns used for PCB analysis are as follows: Primary column - RTX-CLP PESTICIDE II, 30 meter, 0.32 mm ID, 0.25 mm df; Confirmation column - RTX-CLP PESTICIDES, 30 meter, 0.32 mm ID, 0.50 mm df.

Due to insufficient volume, the water samples could not have an MS/MSD evaluation performed. As QC, two spike blanks were extracted and analyzed.

The soil samples were extracted in a batch which contained ARDL SDG 301101; therefore, only one blank and spike blank were extracted. Due to software limitations, the blank and spike blank are designated as SDG 301101, although they are also applicable to ARDL SDG 301100.

The following pages list manual integrations performed on the data. (See hard copy for explanations of manual integrations):

Pages: 50014-50017
50021-50024
50030-50033
50037-50041
50048-50051
50056-50059
50065-50068
50073-50076
50345-50348
50352-50355
50361-50364
50368-50371

No additional problems were encountered in the analysis of these samples.

ORGANIC DATA REPORTING QUALIFIERS

The following organic data reporting qualifiers are used as required.

ORGANIC ANALYSIS DATA PACKAGE

ontract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301100 Samples Received at ARDL: 9/12/02

CASE NARRATIVE (Continued)

ORGANIC DATA REPORTING QUALIFIERS (Continued)

ND- Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the N code is not used.

P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns.

C - This flag applies to pesticide results where the identification has

been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, do not apply this flag; instead use a laboratory-defined flag.

B - This flag is used when the analyte is found in the blank as well as the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must by used for a TIC as well as for a positively identified target compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. If one or more compounds have a response greater than full scale, except as noted in Exhibit D, the sample or extract must be diluted and re-analyzed according to the specifications in Exhibit D. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form 1 for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate copies of Form 1. The Form 1 for the diluted sample shall have the "DL" suffix appended to the sample number.

ORGANIC ANALYSIS DATA PACKAGE

Contract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301100 Samples Received at ARDL: 9/12/02

CASE NARRATIVE (Continued)

ORGANIC DATA REPORTING QUALIFIERS (Continued)

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form 1 for the diluted sample, and all concentration values reported on that Form 1 are flagged with the "D" flag.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized for the Laboratory Manager or his designee, as verified by the following signature.

Daniel J. Gillespie
Technical Services Manager

VOA-8260B

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/19/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FIP-001-06-SSS	ARDL Lab No.:	301100-01
Desc/Location:	NONE	Lab Filename:	Y2543
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1545	Prep. Date:	09/12/2002
Matrix:	SOIL	Analysis Date:	09/12/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0919JFSH
% Moisture:	18.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	12.3	ND		UG/KG	1
Vinyl Chloride	2.2	12.3	ND		UG/KG	1
Bromomethane	1.6	12.3	ND		UG/KG	1
Chloroethane	2	12.3	ND		UG/KG	1
1,1-Dichloroethene	1	6.1	ND		UG/KG	1
Methylene Chloride	2.9	6.1	8		UG/KG	1
trans-1,2-Dichloroethene	0.97	6.1	ND		UG/KG	1
1,1-Dichloroethane	0.28	6.1	ND		UG/KG	1
Carbon disulfide	1.1	6.1	ND		UG/KG	1
cis-1,2-Dichloroethene	0.4	6.1	ND		UG/KG	1
Bromochloromethane	0.99	6.1	ND		UG/KG	1
Chloroform	0.83	6.1	ND		UG/KG	1
1,1,1-Trichloroethane	0.38	6.1	ND		UG/KG	1
Carbon Tetrachloride	0.75	6.1	ND		UG/KG	1
Benzene	0.7	6.1	ND		UG/KG	1
1,2-Dichloroethane	0.45	6.1	ND		UG/KG	1
Trichloroethene	1.1	6.1	ND		UG/KG	1
1,2-Dichloropropane	0.42	6.1	ND		UG/KG	1
Bromodichloromethane	0.28	6.1	ND		UG/KG	1
cis-1,3-Dichloropropene	0.8	6.1	ND		UG/KG	1
Toluene	0.38	6.1	ND		UG/KG	1
trans-1,3-Dichloropropene	0.76	6.1	ND		UG/KG	1
1,1,2-Trichloroethane	0.32	6.1	ND		UG/KG	1
Tetrachloroethene	0.58	6.1	ND		UG/KG	1
Dibromochloromethane	0.28	6.1	ND		UG/KG	1
Chlorobenzene	0.26	6.1	ND		UG/KG	1
Ethyl Benzene	0.44	6.1	ND		UG/KG	1
m & p-Xylene	0.98	6.1	ND		UG/KG	1
o-Xylene	1.1	6.1	ND		UG/KG	1
Styrene	0.43	6.1	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/19/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FIP-001-06-SSS	ARDL Lab No.:	301100-01 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2543
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1545	Prep. Date:	09/12/2002
Matrix:	SOIL	Analysis Date:	09/12/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0919JFSH
% Moisture:	18.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.27	6.1	ND		UG/KG	1
2-Hexanone	22.1	24.5	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	6.1	ND		UG/KG	1
Acetone	39.3	61.3	ND		UG/KG	1
2-Butanone	20.9	61.3	ND		UG/KG	1
4-Methyl-2-pentanone	18.4	24.5	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	97%
1,2-Dichloroethane-d4	78-135	96%
Toluene-d8	86-129	101%
4-Bromofluorobenzene	76-141	102%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/19/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FIP-004-06-SSS	ARDL Lab No.:	301100-02
Desc/Location:	NONE	Lab Filename:	Y2544
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1650	Prep. Date:	09/12/2002
Matrix:	SOIL	Analysis Date:	09/12/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0919JFSH
% Moisture:	19.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.4	12.5	ND		UG/KG	1
Vinyl Chloride	2.2	12.5	ND		UG/KG	1
Bromomethane	1.6	12.5	ND		UG/KG	1
Chloroethane	2	12.5	ND		UG/KG	1
1,1-Dichloroethene	1	6.2	ND		UG/KG	1
Methylene Chloride	3	6.2	7.1		UG/KG	1
trans-1,2-Dichloroethene	0.98	6.2	ND		UG/KG	1
1,1-Dichloroethane	0.29	6.2	ND		UG/KG	1
Carbon disulfide	1.1	6.2	ND		UG/KG	1
cis-1,2-Dichloroethene	0.41	6.2	ND		UG/KG	1
Bromochloromethane	1	6.2	ND		UG/KG	1
Chloroform	0.85	6.2	ND		UG/KG	1
1,1,1-Trichloroethane	0.39	6.2	ND		UG/KG	1
Carbon Tetrachloride	0.76	6.2	ND		UG/KG	1
Benzene	0.71	6.2	ND		UG/KG	1
1,2-Dichloroethane	0.46	6.2	ND		UG/KG	1
Trichloroethene	1.1	6.2	ND		UG/KG	1
1,2-Dichloropropane	0.42	6.2	ND		UG/KG	1
Bromodichloromethane	0.29	6.2	ND		UG/KG	1
cis-1,3-Dichloropropene	0.81	6.2	ND		UG/KG	1
Toluene	0.39	6.2	ND		UG/KG	1
trans-1,3-Dichloropropene	0.77	6.2	ND		UG/KG	1
1,1,2-Trichloroethane	0.32	6.2	ND		UG/KG	1
Tetrachloroethene	0.59	6.2	ND		UG/KG	1
Dibromochloromethane	0.29	6.2	ND		UG/KG	1
Chlorobenzene	0.26	6.2	ND		UG/KG	1
Ethyl Benzene	0.45	6.2	ND		UG/KG	1
m & p-Xylene	1	6.2	ND		UG/KG	1
o-Xylene	1.1	6.2	ND		UG/KG	1
Styrene	0.44	6.2	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/19/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FIP-004-06-SSS	ARDL Lab No.:	301100-02 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2544
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1650	Prep. Date:	09/12/2002
Matrix:	SOIL	Analysis Date:	09/12/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0919JFSH
% Moisture:	19.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.27	6.2	ND		UG/KG	1
2-Hexanone	22.4	24.9	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.9	6.2	ND		UG/KG	1
Acetone	39.9	62.3	ND		UG/KG	1
2-Butanone	21.2	62.3	ND		UG/KG	1
4-Methyl-2-pentanone	18.7	24.9	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	104%
1,2-Dichloroethane-d4	78-135	99%
Toluene-d8	86-129	98%
4-Bromofluorobenzene	76-141	101%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/19/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FIP-002-06-SSS	ARDL Lab No.:	301100-03
Desc/Location:	NONE	Lab Filename:	Y2545
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1736	Prep. Date:	09/12/2002
Matrix:	SOIL	Analysis Date:	09/12/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0919JFSH
% Moisture:	21.9	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.4	12.8	ND		UG/KG	1
Vinyl Chloride	2.3	12.8	ND		UG/KG	1
Bromomethane	1.7	12.8	ND		UG/KG	1
Chloroethane	2	12.8	ND		UG/KG	1
1,1-Dichloroethene	1.1	6.4	ND		UG/KG	1
Methylene Chloride	3.1	6.4	6.7		UG/KG	1
trans-1,2-Dichloroethene	1	6.4	ND		UG/KG	1
1,1-Dichloroethane	0.29	6.4	ND		UG/KG	1
Carbon disulfide	1.1	6.4	ND		UG/KG	1
cis-1,2-Dichloroethene	0.42	6.4	ND		UG/KG	1
Bromochloromethane	1	6.4	ND		UG/KG	1
Chloroform	0.87	6.4	ND		UG/KG	1
1,1,1-Trichloroethane	0.4	6.4	ND		UG/KG	1
Carbon Tetrachloride	0.78	6.4	ND		UG/KG	1
Benzene	0.73	6.4	ND		UG/KG	1
1,2-Dichloroethane	0.47	6.4	ND		UG/KG	1
Trichloroethene	1.1	6.4	ND		UG/KG	1
1,2-Dichloropropane	0.44	6.4	ND		UG/KG	1
Bromodichloromethane	0.29	6.4	ND		UG/KG	1
cis-1,3-Dichloropropene	0.83	6.4	ND		UG/KG	1
Toluene	0.4	6.4	ND		UG/KG	1
trans-1,3-Dichloropropene	0.79	6.4	ND		UG/KG	1
1,1,2-Trichloroethane	0.33	6.4	ND		UG/KG	1
Tetrachloroethene	0.6	6.4	ND		UG/KG	1
Dibromochloromethane	0.29	6.4	ND		UG/KG	1
Chlorobenzene	0.27	6.4	ND		UG/KG	1
Ethyl Benzene	0.46	6.4	ND		UG/KG	1
m & p-Xylene	1	6.4	ND		UG/KG	1
o-Xylene	1.1	6.4	ND		UG/KG	1
Styrene	0.45	6.4	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/19/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FIP-002-06-SSS	ARDL Lab No.:	301100-03 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2545
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1736	Prep. Date:	09/12/2002
Matrix:	SOIL	Analysis Date:	09/12/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0919JFSH
% Moisture:	21.9	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.28	6.4	ND		UG/KG	1
2-Hexanone	23	25.6	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.9	6.4	ND		UG/KG	1
Acetone	41	64.0	71.9		UG/KG	1
2-Butanone	21.8	64.0	ND		UG/KG	1
4-Methyl-2-pentanone	19.2	25.6	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	111%
1,2-Dichloroethane-d4	78-135	105%
Toluene-d8	86-129	101%
4-Bromofluorobenzene	76-141	108%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/19/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FIP-003-06-SSS	ARDL Lab No.:	301100-04
Desc/Location:	NONE	Lab Filename:	Y2546
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1849	Prep. Date:	09/12/2002
Matrix:	SOIL	Analysis Date:	09/12/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0919JFSH
% Moisture:	18.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	12.3	ND		UG/KG	1
Vinyl Chloride	2.2	12.3	ND		UG/KG	1
Bromomethane	1.6	12.3	ND		UG/KG	1
Chloroethane	2	12.3	ND		UG/KG	1
1,1-Dichloroethene	1	6.2	ND		UG/KG	1
Methylene Chloride	3	6.2	ND		UG/KG	1
trans-1,2-Dichloroethene	0.97	6.2	ND		UG/KG	1
1,1-Dichloroethane	0.28	6.2	ND		UG/KG	1
Carbon disulfide	1.1	6.2	ND		UG/KG	1
cis-1,2-Dichloroethene	0.41	6.2	ND		UG/KG	1
Bromochloromethane	1	6.2	ND		UG/KG	1
Chloroform	0.84	6.2	ND		UG/KG	1
1,1,1-Trichloroethane	0.38	6.2	ND		UG/KG	1
Carbon Tetrachloride	0.75	6.2	ND		UG/KG	1
Benzene	0.7	6.2	ND		UG/KG	1
1,2-Dichloroethane	0.46	6.2	ND		UG/KG	1
Trichloroethene	1.1	6.2	ND		UG/KG	1
1,2-Dichloropropane	0.42	6.2	ND		UG/KG	1
Bromodichloromethane	0.28	6.2	ND		UG/KG	1
cis-1,3-Dichloropropene	0.8	6.2	ND		UG/KG	1
Toluene	0.38	6.2	ND		UG/KG	1
trans-1,3-Dichloropropene	0.76	6.2	ND		UG/KG	1
1,1,2-Trichloroethane	0.32	6.2	ND		UG/KG	1
Tetrachloroethene	0.58	6.2	ND		UG/KG	1
Dibromochloromethane	0.28	6.2	ND		UG/KG	1
Chlorobenzene	0.26	6.2	ND		UG/KG	1
Ethyl Benzene	0.44	6.2	ND		UG/KG	1
m & p-Xylene	0.98	6.2	ND		UG/KG	1
o-Xylene	1.1	6.2	ND		UG/KG	1
Styrene	0.43	6.2	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/19/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FIP-003-06-SSS	ARDL Lab No.:	301100-04 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2546
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1849	Prep. Date:	09/12/2002
Matrix:	SOIL	Analysis Date:	09/12/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0919JFSH
% Moisture:	18.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.27	6.2	ND		UG/KG	1
2-Hexanone	22.1	24.6	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	6.2	ND		UG/KG	1
Acetone	39.4	61.5	ND		UG/KG	1
2-Butanone	20.9	61.5	ND		UG/KG	1
4-Methyl-2-pentanone	18.5	24.6	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	117%
1,2-Dichloroethane-d4	78-135	110%
Toluene-d8	86-129	106%
4-Bromofluorobenzene	76-141	111%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/26/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FIP-003-06-ERB	ARDL Lab No.:	301100-05
Desc/Location:	NONE	Lab Filename:	J6516
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1827	Prep. Date:	09/25/2002
Matrix:	WATER	Analysis Date:	09/25/2002
Amount Used:	5 mL	Instrument ID:	HP4
Final Volume:	5 mL	QC Batch:	0926JLSV
% Moisture:	NA	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	1.5	10.0	ND		UG/L	1
Vinyl Chloride	1.5	10.0	ND		UG/L	1
Bromomethane	2.2	10.0	ND		UG/L	1
Chloroethane	1.5	10.0	ND		UG/L	1
1,1-Dichloroethene	0.54	5.0	ND		UG/L	1
Methylene Chloride	3.7	5.0	6.5		UG/L	1
trans-1,2-Dichloroethene	0.38	5.0	ND		UG/L	1
1,1-Dichloroethane	0.23	5.0	ND		UG/L	1
Carbon disulfide	0.67	5.0	ND		UG/L	1
cis-1,2-Dichloroethene	0.26	5.0	ND		UG/L	1
Bromochloromethane	0.66	5.0	ND		UG/L	1
Chloroform	0.17	5.0	3.2	J	UG/L	1
1,1,1-Trichloroethane	0.32	5.0	ND		UG/L	1
Carbon Tetrachloride	0.35	5.0	ND		UG/L	1
Benzene	0.8	5.0	ND		UG/L	1
1,2-Dichloroethane	0.25	5.0	ND		UG/L	1
Trichloroethene	0.75	5.0	ND		UG/L	1
1,2-Dichloropropane	0.29	5.0	ND		UG/L	1
Bromodichloromethane	0.21	5.0	ND		UG/L	1
cis-1,3-Dichloropropene	0.24	5.0	ND		UG/L	1
Toluene	0.56	5.0	4.1	J	UG/L	1
trans-1,3-Dichloropropene	0.73	5.0	ND		UG/L	1
1,1,2-Trichloroethane	0.31	5.0	ND		UG/L	1
Tetrachloroethene	0.53	5.0	ND		UG/L	1
Dibromochloromethane	0.24	5.0	ND		UG/L	1
Chlorobenzene	0.28	5.0	ND		UG/L	1
Ethyl Benzene	0.33	5.0	ND		UG/L	1
m & p-Xylene	0.96	5.0	ND		UG/L	1
o-Xylene	0.36	5.0	ND		UG/L	1
Styrene	0.28	5.0	ND		UG/L	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/26/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FIP-003-06-ERB	ARDL Lab No.:	301100-05 (cont'd)
Desc/Location:	NONE	Lab Filename:	J6516
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1827	Prep. Date:	09/25/2002
Matrix:	WATER	Analysis Date:	09/25/2002
Amount Used:	5 mL	Instrument ID:	HP4
Final Volume:	5 mL	QC Batch:	0926JLSV
% Moisture:	NA	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.24	5.0	ND		UG/L	1
2-Hexanone	18	20.0	ND		UG/L	1
1,1,2,2-Tetrachloroethane	0.71	5.0	ND		UG/L	1
Acetone	43	50.0	44.2	J	UG/L	1
2-Butanone	19	50.0	ND		UG/L	1
4-Methyl-2-pentanone	16	20.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	89-127	110%
1,2-Dichloroethane-d4	79-130	103%
Toluene-d8	84-122	106%
4-Bromofluorobenzene	82-125	107%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

BNA-8270

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FIP-001-06-SSS	ARDL Lab No.:	301100-01
Desc/Location:	NONE	Lab Filename:	Z3974
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1545	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/03/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	18.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	140	405	ND		UG/KG	1
bis(2-Chloroethyl)ether	29.6	405	ND		UG/KG	1
2-Chlorophenol	129	405	ND		UG/KG	1
1,3-Dichlorobenzene	65.5	405	ND		UG/KG	1
1,4-Dichlorobenzene	52.3	405	ND		UG/KG	1
1,2-Dichlorobenzene	59.5	405	ND		UG/KG	1
2-Methylphenol	115	405	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	23.4	405	ND		UG/KG	1
4-Methylphenol	146	405	ND		UG/KG	1
N-Nitroso-di-n-propylamine	27.7	405	ND		UG/KG	1
Hexachloroethane	60.5	405	ND		UG/KG	1
Nitrobenzene	76	405	ND		UG/KG	1
Isophorone	60.9	405	ND		UG/KG	1
2-Nitrophenol	125	405	ND		UG/KG	1
2,4-Dimethylphenol	139	405	ND		UG/KG	1
bis(2-Chloroethoxy)methane	30.6	405	ND		UG/KG	1
2,4-Dichlorophenol	148	405	ND		UG/KG	1
1,2,4-Trichlorobenzene	62.5	405	ND		UG/KG	1
Naphthalene	16.8	405	ND		UG/KG	1
4-Chloroaniline	93.1	405	ND		UG/KG	1
Hexachlorobutadiene	71.3	405	ND		UG/KG	1
4-Chloro-3-methylphenol	121	405	ND		UG/KG	1
2-Methylnaphthalene	76.2	405	ND		UG/KG	1
Hexachlorocyclopentadiene	61.7	405	ND		UG/KG	1
2,4,6-Trichlorophenol	130	405	ND		UG/KG	1
2,4,5-Trichlorophenol	137	405	ND		UG/KG	1
2-Chloronaphthalene	59.9	405	ND		UG/KG	1
2-Nitroaniline	62.9	405	ND		UG/KG	1
Dimethylphthalate	25.4	405	ND		UG/KG	1
2,6-Dinitrotoluene	51.9	405	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FIP-001-06-SSS	ARDL Lab No.:	301100-01 (cont'd)
Desc/Location:	NONE	Lab Filename:	Z3974
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1545	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/03/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	18.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	46.9	405	ND		UG/KG	1
2,4-Dinitrophenol	125	405	ND		UG/KG	1
4-Nitrophenol	110	405	ND		UG/KG	1
Dibenzofuran	82.1	405	ND		UG/KG	1
2,4-Dinitrotoluene	60.2	405	ND		UG/KG	1
Diethylphthalate	17.7	405	ND		UG/KG	1
4-Chlorophenyl-phenylether	26.4	405	ND		UG/KG	1
4-Nitroaniline	49.1	405	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	109	405	ND		UG/KG	1
N-Nitrosodiphenylamine	25.4	405	ND		UG/KG	1
4-Bromophenyl-phenylether	30.1	405	ND		UG/KG	1
Hexachlorobenzene	50.9	405	ND		UG/KG	1
Pentachlorophenol	102	405	ND		UG/KG	1
Di-n-butylphthalate	32.4	405	ND		UG/KG	1
Butylbenzylphthalate	24.9	405	ND		UG/KG	1
3,3'-Dichlorobenzidine	167	405	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	27	405	ND		UG/KG	1
Di-n-octylphthalate	54	405	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	72%
Phenol-d5	24-113	88%
Nitrobenzene-d5	23-120	104%
2-Fluorobiphenyl	30-115	77%
2,4,6-Tribromophenol	19-122	48%
Terphenyl-d14	18-137	69%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FIP-004-06-SSS	ARDL Lab No.:	301100-02
Desc/Location:	NONE	Lab Filename:	Z3977
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1650	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/03/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	19.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	142	411	ND		UG/KG	1
bis(2-Chloroethyl)ether	30	411	ND		UG/KG	1
2-Chlorophenol	131	411	ND		UG/KG	1
1,3-Dichlorobenzene	66.5	411	ND		UG/KG	1
1,4-Dichlorobenzene	53.1	411	ND		UG/KG	1
1,2-Dichlorobenzene	60.4	411	ND		UG/KG	1
2-Methylphenol	117	411	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	23.8	411	ND		UG/KG	1
4-Methylphenol	148	411	ND		UG/KG	1
N-Nitroso-di-n-propylamine	28.1	411	ND		UG/KG	1
Hexachloroethane	61.4	411	ND		UG/KG	1
Nitrobenzene	77.1	411	ND		UG/KG	1
Isophorone	61.8	411	ND		UG/KG	1
2-Nitrophenol	127	411	ND		UG/KG	1
2,4-Dimethylphenol	141	411	ND		UG/KG	1
bis(2-Chloroethoxy)methane	31	411	ND		UG/KG	1
2,4-Dichlorophenol	151	411	ND		UG/KG	1
1,2,4-Trichlorobenzene	63.4	411	ND		UG/KG	1
Naphthalene	17.1	411	ND		UG/KG	1
4-Chloroaniline	94.5	411	ND		UG/KG	1
Hexachlorobutadiene	72.4	411	ND		UG/KG	1
4-Chloro-3-methylphenol	123	411	ND		UG/KG	1
2-Methylnaphthalene	77.3	411	ND		UG/KG	1
Hexachlorocyclopentadiene	62.6	411	ND		UG/KG	1
2,4,6-Trichlorophenol	132	411	ND		UG/KG	1
2,4,5-Trichlorophenol	139	411	ND		UG/KG	1
2-Chloronaphthalene	60.8	411	ND		UG/KG	1
2-Nitroaniline	63.9	411	ND		UG/KG	1
Dimethylphthalate	25.8	411	ND		UG/KG	1
2,6-Dinitrotoluene	52.7	411	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FIP-004-06-SSS	ARDL Lab No.:	301100-02 (cont'd)
Desc/Location:	NONE	Lab Filename:	Z3977
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1650	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/03/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	19.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	47.6	411	ND		UG/KG	1
2,4-Dinitrophenol	127	411	ND		UG/KG	1
4-Nitrophenol	112	411	ND		UG/KG	1
Dibenzofuran	83.3	411	ND		UG/KG	1
2,4-Dinitrotoluene	61.1	411	ND		UG/KG	1
Diethylphthalate	17.9	411	ND		UG/KG	1
4-Chlorophenyl-phenylether	26.8	411	ND		UG/KG	1
4-Nitroaniline	49.8	411	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	111	411	ND		UG/KG	1
N-Nitrosodiphenylamine	25.8	411	ND		UG/KG	1
4-Bromophenyl-phenylether	30.5	411	ND		UG/KG	1
Hexachlorobenzene	51.7	411	ND		UG/KG	1
Pentachlorophenol	103	411	ND		UG/KG	1
Di-n-butylphthalate	32.9	411	ND		UG/KG	1
Butylbenzylphthalate	25.3	411	ND		UG/KG	1
3,3'-Dichlorobenzidine	169	411	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	27.4	411	ND		UG/KG	1
Di-n-octylphthalate	54.8	411	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	66%
Phenol-d5	24-113	82%
Nitrobenzene-d5	23-120	77%
2-Fluorobiphenyl	30-115	73%
2,4,6-Tribromophenol	19-122	55%
Terphenyl-d14	18-137	60%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FIP-002-06-SSS	ARDL Lab No.:	301100-03
Desc/Location:	NONE	Lab Filename:	Z3978
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1736	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/03/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	21.9	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	146	423	ND		UG/KG	1
bis(2-Chloroethyl)ether	30.9	423	ND		UG/KG	1
2-Chlorophenol	134	423	ND		UG/KG	1
1,3-Dichlorobenzene	68.4	423	ND		UG/KG	1
1,4-Dichlorobenzene	54.5	423	ND		UG/KG	1
1,2-Dichlorobenzene	62.1	423	ND		UG/KG	1
2-Methylphenol	120	423	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	24.5	423	ND		UG/KG	1
4-Methylphenol	152	423	ND		UG/KG	1
N-Nitroso-di-n-propylamine	28.9	423	ND		UG/KG	1
Hexachloroethane	63.1	423	ND		UG/KG	1
Nitrobenzene	79.3	423	ND		UG/KG	1
Isophorone	63.5	423	ND		UG/KG	1
2-Nitrophenol	131	423	ND		UG/KG	1
2,4-Dimethylphenol	145	423	ND		UG/KG	1
bis(2-Chloroethoxy)methane	31.9	423	ND		UG/KG	1
2,4-Dichlorophenol	155	423	ND		UG/KG	1
1,2,4-Trichlorobenzene	65.2	423	ND		UG/KG	1
Naphthalene	17.5	423	ND		UG/KG	1
4-Chloroaniline	97.2	423	ND		UG/KG	1
Hexachlorobutadiene	74.4	423	ND		UG/KG	1
4-Chloro-3-methylphenol	126	423	ND		UG/KG	1
2-Methylnaphthalene	79.5	423	ND		UG/KG	1
Hexachlorocyclopentadiene	64.4	423	ND		UG/KG	1
2,4,6-Trichlorophenol	136	423	ND		UG/KG	1
2,4,5-Trichlorophenol	143	423	ND		UG/KG	1
2-Chloronaphthalene	62.5	423	ND		UG/KG	1
2-Nitroaniline	65.7	423	ND		UG/KG	1
Dimethylphthalate	26.5	423	ND		UG/KG	1
2,6-Dinitrotoluene	54.2	423	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FIP-002-06-SSS	ARDL Lab No.:	301100-03 (cont'd)
Desc/Location:	NONE	Lab Filename:	Z3978
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1736	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/03/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	21.9	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	48.9	423	ND		UG/KG	1
2,4-Dinitrophenol	131	423	ND		UG/KG	1
4-Nitrophenol	115	423	ND		UG/KG	1
Dibenzofuran	85.7	423	ND		UG/KG	1
2,4-Dinitrotoluene	62.9	423	ND		UG/KG	1
Diethylphthalate	18.4	423	ND		UG/KG	1
4-Chlorophenyl-phenylether	27.5	423	ND		UG/KG	1
4-Nitroaniline	51.2	423	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	114	423	ND		UG/KG	1
N-Nitrosodiphenylamine	26.5	423	ND		UG/KG	1
4-Bromophenyl-phenylether	31.4	423	ND		UG/KG	1
Hexachlorobenzene	53.1	423	ND		UG/KG	1
Pentachlorophenol	106	423	ND		UG/KG	1
Di-n-butylphthalate	33.8	423	ND		UG/KG	1
Butylbenzylphthalate	26	423	952		UG/KG	1
3,3'-Dichlorobenzidine	174	423	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	28.2	423	124	J	UG/KG	1
Di-n-octylphthalate	56.3	423	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	71%
Phenol-d5	24-113	90%
Nitrobenzene-d5	23-120	77%
2-Fluorobiphenyl	30-115	75%
2,4,6-Tribromophenol	19-122	53%
Terphenyl-d14	18-137	71%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FIP-003-06-SSS	ARDL Lab No.:	301100-04
Desc/Location:	NONE	Lab Filename:	Z3979
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1849	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/03/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	18.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	140	406	ND		UG/KG	1
bis(2-Chloroethyl)ether	29.6	406	ND		UG/KG	1
2-Chlorophenol	129	406	ND		UG/KG	1
1,3-Dichlorobenzene	65.7	406	ND		UG/KG	1
1,4-Dichlorobenzene	52.4	406	ND		UG/KG	1
1,2-Dichlorobenzene	59.7	406	ND		UG/KG	1
2-Methylphenol	115	406	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	23.5	406	ND		UG/KG	1
4-Methylphenol	146	406	ND		UG/KG	1
N-Nitroso-di-n-propylamine	27.8	406	ND		UG/KG	1
Hexachloroethane	60.6	406	ND		UG/KG	1
Nitrobenzene	76.1	406	ND		UG/KG	1
Isophorone	61	406	ND		UG/KG	1
2-Nitrophenol	125	406	ND		UG/KG	1
2,4-Dimethylphenol	139	406	ND		UG/KG	1
bis(2-Chloroethoxy)methane	30.6	406	ND		UG/KG	1
2,4-Dichlorophenol	149	406	ND		UG/KG	1
1,2,4-Trichlorobenzene	62.6	406	ND		UG/KG	1
Naphthalene	16.9	406	ND		UG/KG	1
4-Chloroaniline	93.4	406	ND		UG/KG	1
Hexachlorobutadiene	71.5	406	ND		UG/KG	1
4-Chloro-3-methylphenol	121	406	ND		UG/KG	1
2-Methylnaphthalene	76.4	406	ND		UG/KG	1
Hexachlorocyclopentadiene	61.9	406	ND		UG/KG	1
2,4,6-Trichlorophenol	130	406	ND		UG/KG	1
2,4,5-Trichlorophenol	138	406	ND		UG/KG	1
2-Chloronaphthalene	60	406	ND		UG/KG	1
2-Nitroaniline	63.1	406	ND		UG/KG	1
Dimethylphthalate	25.5	406	ND		UG/KG	1
2,6-Dinitrotoluene	52	406	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FIP-003-06-SSS	ARDL Lab No.:	301100-04	(cont'd)
Desc/Location:	NONE	Lab Filename:	Z3979	
Sample Date:	09/11/2002	Received Date:	09/12/2002	
Sample Time:	1849	Prep. Date:	09/16/2002	
Matrix:	SOIL	Analysis Date:	10/03/2002	
Amount Used:	30 g	Instrument ID:	HP6	
Final Volume:	1 mL	QC Batch:	B5023	
% Moisture:	18.7	Level:	LOW	

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	47	406	ND		UG/KG	1
2,4-Dinitrophenol	125	406	ND		UG/KG	1
4-Nitrophenol	110	406	ND		UG/KG	1
Dibenzofuran	82.3	406	ND		UG/KG	1
2,4-Dinitrotoluene	60.4	406	ND		UG/KG	1
Diethylphthalate	17.7	406	ND		UG/KG	1
4-Chlorophenyl-phenylether	26.4	406	ND		UG/KG	1
4-Nitroaniline	49.2	406	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	110	406	ND		UG/KG	1
N-Nitrosodiphenylamine	25.5	406	ND		UG/KG	1
4-Bromophenyl-phenylether	30.1	406	ND		UG/KG	1
Hexachlorobenzene	51	406	ND		UG/KG	1
Pentachlorophenol	102	406	ND		UG/KG	1
Di-n-butylphthalate	32.5	406	ND		UG/KG	1
Butylbenzylphthalate	25	406	77.3	J	UG/KG	1
3,3'-Dichlorobenzidine	167	406	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	27.1	406	ND		UG/KG	1
Di-n-octylphthalate	54.1	406	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	70%
Phenol-d5	24-113	93%
Nitrobenzene-d5	23-120	91%
2-Fluorobiphenyl	30-115	78%
2,4,6-Tribromophenol	19-122	53%
Terphenyl-d14	18-137	70%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

PCB's-8082

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/24/2002

Project Name:	USACE FT DEARBORN	Analysis:	PCB'S
Project No.:	17297	Analytical Method:	8082
		Prep Method:	3550A

Field ID:	FIP-001-06-SSS	ARDL Lab No.:	301100-01
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1545	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/20/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4997
% Moisture:	18.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.1	40.5	ND		UG/KG	1
Aroclor 1221	16.6	82.2	ND		UG/KG	1
Aroclor 1232	10.2	40.5	ND		UG/KG	1
Aroclor 1242	11.4	40.5	ND		UG/KG	1
Aroclor 1248	7.6	40.5	ND		UG/KG	1
Aroclor 1254	5.3	40.5	ND		UG/KG	1
Aroclor 1260	6.8	40.5	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	74%
Tetrachloro-m-xylene	42-94	74%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/24/2002

Project Name:	USACE FT DEARBORN	Analysis:	PCB'S
Project No.:	17297	Analytical Method:	8082
		Prep Method:	3550A

Field ID:	FIP-004-06-SSS	ARDL Lab No.:	301100-02
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1650	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/20/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4997
% Moisture:	19.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.3	41.1	ND		UG/KG	1
Aroclor 1221	16.8	83.4	ND		UG/KG	1
Aroclor 1232	10.4	41.1	ND		UG/KG	1
Aroclor 1242	11.6	41.1	ND		UG/KG	1
Aroclor 1248	7.7	41.1	ND		UG/KG	1
Aroclor 1254	5.4	41.1	ND		UG/KG	1
Aroclor 1260	6.9	41.1	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	80%
Tetrachloro-m-xylene	42-94	80%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	FIP-002-06-SSS	ARDL Lab No.:	301100-03
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1736	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/19/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4997
% Moisture:	21.9	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.5	42.3	ND		UG/KG	1
Aroclor 1221	17.3	85.8	ND		UG/KG	1
Aroclor 1232	10.7	42.3	ND		UG/KG	1
Aroclor 1242	11.9	42.3	ND		UG/KG	1
Aroclor 1248	8	42.3	ND		UG/KG	1
Aroclor 1254	5.5	42.3	ND		UG/KG	1
Aroclor 1260	7.1	42.3	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	60%
Tetrachloro-m-xylene	42-94	68%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	FIP-003-06-SSS	ARDL Lab No.:	301100-04
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1849	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/20/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4997
% Moisture:	18.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.2	40.6	ND		UG/KG	1
Aroclor 1221	16.6	82.4	ND		UG/KG	1
Aroclor 1232	10.2	40.6	ND		UG/KG	1
Aroclor 1242	11.4	40.6	ND		UG/KG	1
Aroclor 1248	7.6	40.6	ND		UG/KG	1
Aroclor 1254	5.3	40.6	ND		UG/KG	1
Aroclor 1260	6.8	40.6	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	63%
Tetrachloro-m-xylene	42-94	66%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

PAH-8270 SIM

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 10/04/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FIP-001-06-SSS	ARDL Lab No.:	301100-01
Desc/Location:	NONE	Lab Filename:	Z3787
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1545	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/24/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5000
% Moisture:	18.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.4	12.3	ND		UG/KG	1
Acenaphthylene	2.9	12.3	ND		UG/KG	1
Acenaphthene	3.4	12.3	ND		UG/KG	1
Fluorene	2.9	12.3	ND		UG/KG	1
Phenanthrene	3.1	12.3	ND		UG/KG	1
Anthracene	2.5	12.3	ND		UG/KG	1
Fluoranthene	3.2	12.3	4.4	J	UG/KG	1
Pyrene	2.3	12.3	10.3	J	UG/KG	1
Benzo(a)anthracene	2.4	12.3	ND		UG/KG	1
Chrysene	2.9	12.3	ND		UG/KG	1
Benzo(b)fluoranthene	2.9	12.3	ND		UG/KG	1
Benzo(k)fluoranthene	4.5	12.3	ND		UG/KG	1
Benzo(a)pyrene	2.7	12.3	ND		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.9	12.3	ND		UG/KG	1
Dibenzo(a,h)anthracene	2.7	12.3	ND		UG/KG	1
Benzo(g,h,i)perylene	2.9	12.3	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	68%
Nitrobenzene-d5	23-120	74%
Terphenyl-d14	18-137	85%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 10/04/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FIP-004-06-SSS	ARDL Lab No.:	301100-02
Desc/Location:	NONE	Lab Filename:	Z3790
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1650	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/24/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5000
% Moisture:	19.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.5	12.5	ND		UG/KG	1
Acenaphthylene	3	12.5	ND		UG/KG	1
Acenaphthene	3.4	12.5	ND		UG/KG	1
Fluorene	2.9	12.5	6.2	J	UG/KG	1
Phenanthrene	3.2	12.5	ND		UG/KG	1
Anthracene	2.5	12.5	ND		UG/KG	1
Fluoranthene	3.2	12.5	15.7		UG/KG	1
Pyrene	2.3	12.5	36.9		UG/KG	1
Benzo(a)anthracene	2.4	12.5	ND		UG/KG	1
Chrysene	2.9	12.5	16.3		UG/KG	1
Benzo(b)fluoranthene	3	12.5	ND		UG/KG	1
Benzo(k)fluoranthene	4.6	12.5	ND		UG/KG	1
Benzo(a)pyrene	2.8	12.5	10.7	J	UG/KG	1
Indeno(1,2,3-cd)pyrene	2.9	12.5	ND		UG/KG	1
Dibenzo(a,h)anthracene	2.7	12.5	ND		UG/KG	1
Benzo(g,h,i)perylene	3	12.5	9.1	J	UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	69%
Nitrobenzene-d5	23-120	59%
Terphenyl-d14	18-137	72%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 10/11/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FIP-002-06-SSS	ARDL Lab No.:	301100-03
Desc/Location:	NONE	Lab Filename:	Z3791
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1736	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/24/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5000
% Moisture:	21.9	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.5	12.8	ND		UG/KG	1
Acenaphthylene	3	12.8	ND		UG/KG	1
Acenaphthene	3.5	12.8	ND		UG/KG	1
Fluorene	3	12.8	ND		UG/KG	1
Phenanthrene	3.2	12.8	ND		UG/KG	1
Anthracene	2.6	12.8	ND		UG/KG	1
Fluoranthene	3.3	12.8	13.7		UG/KG	1
Pyrene	2.4	12.8	48.0		UG/KG	1
Benzo(a)anthracene	2.5	12.8	ND		UG/KG	1
Chrysene	3	12.8	ND		UG/KG	1
Benzo(b)fluoranthene	3	12.8	ND		UG/KG	1
Benzo(k)fluoranthene	4.7	12.8	ND		UG/KG	1
Benzo(a)pyrene	2.9	12.8	32.0		UG/KG	1
Indeno(1,2,3-cd)pyrene	3	12.8	ND		UG/KG	1
Dibenzo(a,h)anthracene	2.8	12.8	ND		UG/KG	1
Benzo(g,h,i)perylene	3.1	12.8	23.9		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	59%
Nitrobenzene-d5	23-120	53%
Terphenyl-d14	18-137	66%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 10/11/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FIP-003-06-SSS	ARDL Lab No.:	301100-04
Desc/Location:	NONE	Lab Filename:	Z3792
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1849	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/24/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5000
% Moisture:	18.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.4	12.3	ND		UG/KG	1
Acenaphthylene	2.9	12.3	ND		UG/KG	1
Acenaphthene	3.4	12.3	ND		UG/KG	1
Fluorene	2.9	12.3	ND		UG/KG	1
Phenanthrene	3.1	12.3	ND		UG/KG	1
Anthracene	2.5	12.3	ND		UG/KG	1
Fluoranthene	3.2	12.3	8.2	J	UG/KG	1
Pyrene	2.3	12.3	23.5		UG/KG	1
Benzo(a)anthracene	2.4	12.3	ND		UG/KG	1
Chrysene	2.9	12.3	ND		UG/KG	1
Benzo(b)fluoranthene	2.9	12.3	ND		UG/KG	1
Benzo(k)fluoranthene	4.5	12.3	ND		UG/KG	1
Benzo(a)pyrene	2.8	12.3	ND		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.9	12.3	ND		UG/KG	1
Dibenzo(a,h)anthracene	2.7	12.3	ND		UG/KG	1
Benzo(g,h,i)perylene	2.9	12.3	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	57%
Nitrobenzene-d5	23-120	55%
Terphenyl-d14	18-137	57%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

INORGANICS

INORGANIC ANALYSIS DATA PACKAGE

FERGUSON HARBOR

Report Date: 09/27/02

Delivery Order No.: 17297

ARDL Report No.: 301100

Lab Name: ARDL, Inc.
Samples Received at ARDL: 12-Sep-02
Project Name: USACE Ft. Dearborn

CASE NARRATIVE

Sample ID No.	Date Collected	Lab ID No.	Analysis Requested
FIP-001-06-SSS	09/11/02	301100-01	Total Metals(1), Total Solids
FIP-004-06-SSS	09/11/02	301100-02	Total Metals(1), Total Solids
FIP-002-06-SSS	09/11/02	301100-03	Total Metals(1), Total Solids
FIP-003-06-SSS	09/11/02	301100-04	Total Metals(1), Total Solids
FIP-003-06-ERB	09/11/02	301100-05	Total Metals(1)

(1) Including aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, nickel, potassium, selenium, silver, sodium, thallium, vanadium and zinc.

The quality control data are summarized as follows:

LABORATORY CONTROL SAMPLES
Percent recovery of all LCS analyses were within control limits.

PREPARATION BLANKS
Results of all preparation blanks were within acceptable limits.

MATRIX SPIKES
Percent recovery of all matrix spikes and matrix spike duplicates except 1 of 2 for copper and nickel and 2 of 2 for antimony in the soil matrix were within control limits. Sample results for aluminum, iron and manganese in the soil matrix were greater than 4 times the spike amount; therefore, percent recovery was not considered.

DUPLICATES
RPD on all duplicate analyses were within control limits.
All duplicate analyses are reported as MS/MSD except calcium, magnesium, potassium, sodium and total solids which are reported as sample/duplicate.

Release of the data contained in this package has been authorized by the Technical Services Manager or his designee as verified by the following signature.

Daniel J. Gillespie
Technical Services Manager

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: FIP-001-06-SSS ARDL No: 301100-01
Sampling Loc'n: NONE Received: 09/12/2002
Sampling Date: 09/11/2002 Matrix: SOIL
Sampling Time: 1545 Moisture: 18.5

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.3	8750	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Antimony	0.61	1	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Arsenic	0.37	14.0	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Barium	1.2	60.4	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Beryllium	0.12	0.44	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cadmium	0.25	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Calcium	12.3	31200	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Chromium	0.61	16.3	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cobalt	0.61	13.6	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Copper	1.2	56.3	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Iron	6.1	27600	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Lead	0.37	25.3	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Magnesium	12.3	22100	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Manganese	0.61	606	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Mercury	0.098	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.8	39.0	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Potassium	245	1580	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Selenium	0.61	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Silver	0.61	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Sodium	49.1	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Thallium	0.37	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Vanadium	0.61	19.6	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Zinc	0.61	67.0	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Solids, Percent	1	81.5	%	NONE	160.3	NA	09/12/02	09179441

ARDL, INC.
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Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: FIP-004-06-SSS ARDL No: 301100-02
Sampling Loc'n: NONE Received: 09/12/2002
Sampling Date: 09/11/2002 Matrix: SOIL
Sampling Time: 1650 Moisture: 19.7

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.5	7710	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Antimony	0.62	1.1	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Arsenic	0.37	9.8	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Barium	1.2	61.2	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Beryllium	0.12	0.33	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cadmium	0.25	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Calcium	12.5	37500	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Chromium	0.62	12.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cobalt	0.62	8.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Copper	1.2	36.7	MG/KG	3050B	6010B	09/18/02	09/23/02	P3997
Iron	6.2	20200	MG/KG	3050B	6010B	09/18/02	09/23/02	P3996
Lead	0.37	18.7	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Magnesium	12.5	24900	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Manganese	0.62	413	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Mercury	0.1	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.9	25.4	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Potassium	249	1330	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Selenium	0.62	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Silver	0.62	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Sodium	49.8	64.6	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Thallium	0.37	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Vanadium	0.62	13.7	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Zinc	0.62	57.6	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Solids, Percent	1	80.3	%	NONE	160.3	NA	09/12/02	09179441

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: FIP-002-06-SSS ARDL No: 301100-03
Sampling Loc'n: NONE Received: 09/12/2002
Sampling Date: 09/11/2002 Matrix: SOIL
Sampling Time: 1736 Moisture: 21.9

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.8	10300	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Antimony	0.64	0.84	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Arsenic	0.38	8.6	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Barium	1.3	88.3	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Beryllium	0.13	0.38	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cadmium	0.26	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Calcium	12.8	29000	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Chromium	0.64	17.8	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cobalt	0.64	10.2	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Copper	1.3	34.3	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Iron	6.4	22500	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Lead	0.38	30.5	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Magnesium	12.8	19900	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Manganese	0.64	470	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Mercury	0.1	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.9	27.7	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Potassium	256	1250	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Selenium	0.64	0.94	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Silver	0.64	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Sodium	51.2	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Thallium	0.38	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Vanadium	0.64	20.7	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Zinc	0.64	57.1	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Solids, Percent	1	78.1	%	NONE	160.3	NA	09/12/02	09179441

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: FIP-003-06-SSS ARDL No: 301100-04
Sampling Loc'n: NONE Received: 09/12/2002
Sampling Date: 09/11/2002 Matrix: SOIL
Sampling Time: 1849 Moisture: 18.7

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.3	8380	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Antimony	0.62	0.82	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Arsenic	0.37	8.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Barium	1.2	70.8	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Beryllium	0.12	0.28	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cadmium	0.25	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Calcium	12.3	35400	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Chromium	0.62	13.8	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cobalt	0.62	7.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Copper	1.2	32.7	MG/KG	3050B	6010B	09/18/02	09/23/02	P39[illegible]
Iron	6.2	20100	MG/KG	3050B	6010B	09/18/02	09/23/02	P39[illegible]
Lead	0.37	14.7	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Magnesium	12.3	24900	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Manganese	0.62	384	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Mercury	0.098	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.8	22.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Potassium	246	1180	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Selenium	0.62	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Silver	0.62	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Sodium	49.2	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Thallium	0.37	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Vanadium	0.62	15.5	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Zinc	0.62	48.5	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Solids, Percent	1	81.3	%	NONE	160.3	NA	09/12/02	09179441

ARDL, INC.
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Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: FIP-003-06-ERB ARDL No: 301100-05
Sampling Loc'n: NONE Received: 09/12/2002
Sampling Date: 09/11/2002 Matrix: WATER
Sampling Time: 1827 Moisture: NA

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	0.1	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Antimony	0.005	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Arsenic	0.003	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Barium	0.01	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Beryllium	0.001	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Cadmium	0.002	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Calcium	0.1	0.33	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Chromium	0.005	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Cobalt	0.005	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Copper	0.01	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Iron	0.05	0.13	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Lead	0.003	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Magnesium	0.1	0.11	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Manganese	0.005	0.017	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Mercury	0.0002	ND	MG/L	7470A	7470A	09/16/02	09/16/02	C1640
Nickel	0.015	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Potassium	2	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Selenium	0.005	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Silver	0.005	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Sodium	0.4	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Thallium	0.003	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Vanadium	0.005	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Zinc	0.005	0.0082	MG/L	3010A	6010B	09/19/02	09/23/02	P3999

ORGANIC ANALYSIS DATA PACKAGE

Contract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301101 Samples Received at ARDL: 9/13/02

CASE NARRATIVE

GLYCOL FRACTION - METHOD 8015M

Soil samples were received by ARDL, Inc. on September 13, 2002,for Glycol analysis. The samples were extracted with the method specified holding time.

No problems were encountered during the analysis of these samples.

PCB FRACTION - METHOD 8082

Soil samples were received by ARDL, Inc. on September 13, 2002, for PCB analysis. The samples were extracted within holding time requirements.

The soil samples were cleaned up by acid hydrolysis.

The columns used for PCB analysis are as follows: Primary column - RTX-CLP PESTICIDE II, 30 meter, 0.32 mm ID, 0.25 mm df; Confirmation column - RTX-CLP PESTICIDES, 30 meter, 0.32 mm ID, 0.50 mm df.

The following pages list manual integrations performed on the data. (See hard copy for explanation of manual integrations):

Pages: 50012-50015
50019-50022
50028-50031
50035-50038
50043-50047
50051-50054
50060-50063
50068-50071
50299-50302
50306-50309
50315-50318
50322-50325

No problems were encountered in the analysis of these samples.

SEMIVOLATILE FRACTION

Soil samples were received by ARDL, Inc. on September 13, 2002, for BNA analysis by GC/MS. All analyses were performed according to low level protocol within method specified holding times.

Compound 4-Nitrophenol exhibited high recovery in the spiked blank and MS/MSD. None found in samples, so no needed action.

1,4-Dichlorobenzene was low in MS/MSD, but within range in spike blank, no further action needed.

ORGANIC ANALYSIS DATA PACKAGE

ɔntract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301101 Samples Received at ARDL: 9/13/02

CASE NARRATIVE (Continued)

SEMIVOLATILE FRACTION (Continued)

No other unusual problems were encountered during the sample extraction or samples analyses.

VOLATILE FRACTION - METHOD 8260

Water and soil samples were received by ARDL, Inc. on September 13, 2002, for VOA analysis by GC/MS. All analyses were performed within the method specified holding time.

On the chromatograms, the injected date stamp appears as "**" instead of "02" for the year 2002. The quantitation date stamp is correct and accurately represents the year of the injection date.

No problems were encountered during the sample analyses.

NA FRACTION

Soil samples were received by ARDL, Inc. on September 13, 2002, for PNA-SIM analysis by GC/MS. All analyses were performed according to low level protocol within method specified holding times.

Sample VWR-005-02-EBT had an internal standard just below the lower recovery limit. The associated MS/MSD were just inside the lower limit. The trend of suppressed internal standard indicated it was matrix related, so there were no reanalysis.

Sample VWR-005-02-EBT required a manual integration for the compound benzo(b)fluoranthene. Samples VWR-006-02-EBT and VWR-003-02-ESW also required manual integrations for the compound benzo(k)fluoranthene.

No other unusual problems were encountered during the sample extraction or sample analysis.

ORGANIC DATA REPORTING QUALIFIERS

The following organic data reporting qualifiers are used as required.

ND- Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

- Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the

Contract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301101 Samples Received at ARDL: 9/13/02

CASE NARRATIVE (Continued)

ORGANIC DATA REPORTING QUALIFIERS (Continued)

result is less than the sample quantitation limit but greater than zero.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the N code is not used.

P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns.

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, do not apply this flag; instead use a laboratory-defined flag.

B - This flag is used when the analyte is found in the blank as well as the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must by used for a TIC as well as for a positively identified target compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. If one or more compounds have a response greater than full scale, except as noted in Exhibit D, the sample or extract must be diluted and re-analyzed according to the specifications in Exhibit D. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form 1 for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate copies of Form 1. The Form 1 for the diluted sample shall have the "DL" suffix appended to the sample number.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form 1 for the diluted sample, and all concentration values reported on that Form 1 are flagged with the "D" flag.

VOA-8260B

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/19/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-005-02-EBT	ARDL Lab No.:	301101-01
Desc/Location:	NONE	Lab Filename:	Y2555
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1051	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0919JFSI
% Moisture:	14.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.2	11.7	ND		UG/KG	1
Vinyl Chloride	2.1	11.7	ND		UG/KG	1
Bromomethane	1.5	11.7	ND		UG/KG	1
Chloroethane	1.9	11.7	ND		UG/KG	1
1,1-Dichloroethene	0.97	5.8	ND		UG/KG	1
Methylene Chloride	2.8	5.8	6.9		UG/KG	1
trans-1,2-Dichloroethene	0.92	5.8	ND		UG/KG	1
1,1-Dichloroethane	0.27	5.8	ND		UG/KG	1
Carbon disulfide	1	5.8	ND		UG/KG	1
cis-1,2-Dichloroethene	0.39	5.8	ND		UG/KG	1
Bromochloromethane	0.95	5.8	ND		UG/KG	1
Chloroform	0.8	5.8	ND		UG/KG	1
1,1,1-Trichloroethane	0.36	5.8	ND		UG/KG	1
Carbon Tetrachloride	0.71	5.8	ND		UG/KG	1
Benzene	0.67	5.8	ND		UG/KG	1
1,2-Dichloroethane	0.43	5.8	ND		UG/KG	1
Trichloroethene	1	5.8	ND		UG/KG	1
1,2-Dichloropropane	0.4	5.8	ND		UG/KG	1
Bromodichloromethane	0.27	5.8	ND		UG/KG	1
cis-1,3-Dichloropropene	0.76	5.8	ND		UG/KG	1
Toluene	0.36	5.8	ND		UG/KG	1
trans-1,3-Dichloropropene	0.73	5.8	ND		UG/KG	1
1,1,2-Trichloroethane	0.3	5.8	ND		UG/KG	1
Tetrachloroethene	0.55	5.8	ND		UG/KG	1
Dibromochloromethane	0.27	5.8	ND		UG/KG	1
Chlorobenzene	0.25	5.8	ND		UG/KG	1
Ethyl Benzene	0.42	5.8	ND		UG/KG	1
m & p-Xylene	0.94	5.8	ND		UG/KG	1
o-Xylene	1	5.8	ND		UG/KG	1
Styrene	0.41	5.8	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/19/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-005-02-EBT	ARDL Lab No.:	301101-01 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2555
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1051	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0919JFSI
% Moisture:	14.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.26	5.8	ND		UG/KG	1
2-Hexanone	21.1	23.4	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	5.8	ND		UG/KG	1
Acetone	37.4	58.5	ND		UG/KG	1
2-Butanone	19.9	58.5	ND		UG/KG	1
4-Methyl-2-pentanone	17.5	23.4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	106%
1,2-Dichloroethane-d4	78-135	98%
Toluene-d8	86-129	98%
4-Bromofluorobenzene	76-141	102%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/23/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-006-02-EBT	ARDL Lab No.:	301101-02
Desc/Location:	NONE	Lab Filename:	Y2574
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0920JFSJ
% Moisture:	15.8	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	11.9	ND		UG/KG	1
Vinyl Chloride	2.1	11.9	ND		UG/KG	1
Bromomethane	1.5	11.9	ND		UG/KG	1
Chloroethane	1.9	11.9	ND		UG/KG	1
1,1-Dichloroethene	0.99	5.9	ND		UG/KG	1
Methylene Chloride	2.9	5.9	7.9		UG/KG	1
trans-1,2-Dichloroethene	0.94	5.9	ND		UG/KG	1
1,1-Dichloroethane	0.27	5.9	ND		UG/KG	1
Carbon disulfide	1	5.9	ND		UG/KG	1
cis-1,2-Dichloroethene	0.39	5.9	ND		UG/KG	1
Bromochloromethane	0.96	5.9	ND		UG/KG	1
Chloroform	0.81	5.9	ND		UG/KG	1
1,1,1-Trichloroethane	0.37	5.9	ND		UG/KG	1
Carbon Tetrachloride	0.72	5.9	ND		UG/KG	1
Benzene	0.68	5.9	ND		UG/KG	1
1,2-Dichloroethane	0.44	5.9	ND		UG/KG	1
Trichloroethene	1	5.9	ND		UG/KG	1
1,2-Dichloropropane	0.4	5.9	ND		UG/KG	1
Bromodichloromethane	0.27	5.9	ND		UG/KG	1
cis-1,3-Dichloropropene	0.77	5.9	ND		UG/KG	1
Toluene	0.37	5.9	ND		UG/KG	1
trans-1,3-Dichloropropene	0.74	5.9	ND		UG/KG	1
1,1,2-Trichloroethane	0.31	5.9	ND		UG/KG	1
Tetrachloroethene	0.56	5.9	ND		UG/KG	1
Dibromochloromethane	0.27	5.9	ND		UG/KG	1
Chlorobenzene	0.25	5.9	ND		UG/KG	1
Ethyl Benzene	0.43	5.9	ND		UG/KG	1
m & p-Xylene	0.95	5.9	ND		UG/KG	1
o-Xylene	1	5.9	ND		UG/KG	1
Styrene	0.42	5.9	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/23/2002

Project Name:	USACE FT DEARBORN	Analysis:	VOLATILES, GC/MS (8260)
Project No.:	17297	Analytical Method:	8260B
		Prep Method:	5030A

Field ID:	VWR-006-02-EBT	ARDL Lab No.:	301101-02 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2574
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0920JFSJ
% Moisture:	15.8	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.26	5.9	ND		UG/KG	1
2-Hexanone	21.4	23.8	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	5.9	ND		UG/KG	1
Acetone	38	59.4	57.4	J	UG/KG	1
2-Butanone	20.2	59.4	ND		UG/KG	1
4-Methyl-2-pentanone	17.8	23.8	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	108%
1,2-Dichloroethane-d4	78-135	99%
Toluene-d8	86-129	107%
4-Bromofluorobenzene	76-141	112%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/19/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-008-02-EBT	ARDL Lab No.:	301101-04
Desc/Location:	NONE	Lab Filename:	Y2557
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0919JFSI
% Moisture:	15.6	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	11.8	ND		UG/KG	1
Vinyl Chloride	2.1	11.8	ND		UG/KG	1
Bromomethane	1.5	11.8	ND		UG/KG	1
Chloroethane	1.9	11.8	ND		UG/KG	1
1,1-Dichloroethene	0.98	5.9	ND		UG/KG	1
Methylene Chloride	2.8	5.9	7.4		UG/KG	1
trans-1,2-Dichloroethene	0.94	5.9	ND		UG/KG	1
1,1-Dichloroethane	0.27	5.9	ND		UG/KG	1
Carbon disulfide	1	5.9	ND		UG/KG	1
cis-1,2-Dichloroethene	0.39	5.9	ND		UG/KG	1
Bromochloromethane	0.96	5.9	ND		UG/KG	1
Chloroform	0.81	5.9	ND		UG/KG	1
1,1,1-Trichloroethane	0.37	5.9	ND		UG/KG	1
Carbon Tetrachloride	0.72	5.9	ND		UG/KG	1
Benzene	0.68	5.9	ND		UG/KG	1
1,2-Dichloroethane	0.44	5.9	ND		UG/KG	1
Trichloroethene	1	5.9	ND		UG/KG	1
1,2-Dichloropropane	0.4	5.9	ND		UG/KG	1
Bromodichloromethane	0.27	5.9	ND		UG/KG	1
cis-1,3-Dichloropropene	0.77	5.9	ND		UG/KG	1
Toluene	0.37	5.9	ND		UG/KG	1
trans-1,3-Dichloropropene	0.73	5.9	ND		UG/KG	1
1,1,2-Trichloroethane	0.31	5.9	ND		UG/KG	1
Tetrachloroethene	0.56	5.9	ND		UG/KG	1
Dibromochloromethane	0.27	5.9	ND		UG/KG	1
Chlorobenzene	0.25	5.9	ND		UG/KG	1
Ethyl Benzene	0.43	5.9	ND		UG/KG	1
m & p-Xylene	0.95	5.9	ND		UG/KG	1
o-Xylene	1	5.9	ND		UG/KG	1
Styrene	0.41	5.9	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/19/2002

Project Name:	USACE FT DEARBORN	Analysis:	VOLATILES, GC/MS (8260)
Project No.:	17297	Analytical Method:	8260B
		Prep Method:	5030A

Field ID:	VWR-008-02-EBT	ARDL Lab No.:	301101-04 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2557
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0919JFSI
% Moisture:	15.6	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.26	5.9	ND		UG/KG	1
2-Hexanone	21.3	23.7	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	5.9	ND		UG/KG	1
Acetone	37.9	59.2	ND		UG/KG	1
2-Butanone	20.1	59.2	ND		UG/KG	1
4-Methyl-2-pentanone	17.8	23.7	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	111%
1,2-Dichloroethane-d4	78-135	106%
Toluene-d8	86-129	106%
4-Bromofluorobenzene	76-141	114%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/19/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-003-02-ESW	ARDL Lab No.:	301101-05
Desc/Location:	NONE	Lab Filename:	Y2558
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0919JFSI
% Moisture:	14.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.2	11.7	ND		UG/KG	1
Vinyl Chloride	2.1	11.7	ND		UG/KG	1
Bromomethane	1.5	11.7	ND		UG/KG	1
Chloroethane	1.9	11.7	ND		UG/KG	1
1,1-Dichloroethene	0.97	5.8	ND		UG/KG	1
Methylene Chloride	2.8	5.8	6.8		UG/KG	1
trans-1,2-Dichloroethene	0.92	5.8	ND		UG/KG	1
1,1-Dichloroethane	0.27	5.8	ND		UG/KG	1
Carbon disulfide	1	5.8	ND		UG/KG	1
cis-1,2-Dichloroethene	0.39	5.8	ND		UG/KG	1
Bromochloromethane	0.95	5.8	ND		UG/KG	1
Chloroform	0.79	5.8	ND		UG/KG	1
1,1,1-Trichloroethane	0.36	5.8	ND		UG/KG	1
Carbon Tetrachloride	0.71	5.8	ND		UG/KG	1
Benzene	0.67	5.8	ND		UG/KG	1
1,2-Dichloroethane	0.43	5.8	ND		UG/KG	1
Trichloroethene	1	5.8	ND		UG/KG	1
1,2-Dichloropropane	0.4	5.8	ND		UG/KG	1
Bromodichloromethane	0.27	5.8	ND		UG/KG	1
cis-1,3-Dichloropropene	0.76	5.8	ND		UG/KG	1
Toluene	0.36	5.8	ND		UG/KG	1
trans-1,3-Dichloropropene	0.72	5.8	ND		UG/KG	1
1,1,2-Trichloroethane	0.3	5.8	ND		UG/KG	1
Tetrachloroethene	0.55	5.8	ND		UG/KG	1
Dibromochloromethane	0.27	5.8	ND		UG/KG	1
Chlorobenzene	0.25	5.8	ND		UG/KG	1
Ethyl Benzene	0.42	5.8	ND		UG/KG	1
m & p-Xylene	0.93	5.8	ND		UG/KG	1
o-Xylene	1	5.8	ND		UG/KG	1
Styrene	0.41	5.8	ND		UG/KG	1

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Lab Report No: 301101 Report Date: 09/19/2002

Project Name: USACE FT DEARBORN
Project No.: 17297
Analysis: VOLATILES, GC/MS (8260)
Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-003-02-ESW	ARDL Lab No.:	301101-05 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2558
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0919JFSI
% Moisture:	14.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.26	5.8	ND		UG/KG	1
2-Hexanone	21	23.3	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	5.8	ND		UG/KG	1
Acetone	37.3	58.3	ND		UG/KG	1
2-Butanone	19.8	58.3	ND		UG/KG	1
4-Methyl-2-pentanone	17.5	23.3	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	110%
1,2-Dichloroethane-d4	78-135	105%
Toluene-d8	86-129	108%
4-Bromofluorobenzene	76-141	111%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

BNA-8270

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-005-02-EBT	ARDL Lab No.:	301101-01
Desc/Location:	NONE	Lab Filename:	Z3980
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1051	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/04/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	14.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	133	386	ND		UG/KG	1
bis(2-Chloroethyl)ether	28.2	386	ND		UG/KG	1
2-Chlorophenol	123	386	ND		UG/KG	1
1,3-Dichlorobenzene	62.5	386	ND		UG/KG	1
1,4-Dichlorobenzene	49.8	386	ND		UG/KG	1
1,2-Dichlorobenzene	56.7	386	ND		UG/KG	1
2-Methylphenol	110	386	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	22.3	386	ND		UG/KG	1
4-Methylphenol	139	386	ND		UG/KG	1
N-Nitroso-di-n-propylamine	26.4	386	ND		UG/KG	1
Hexachloroethane	57.7	386	ND		UG/KG	1
Nitrobenzene	72.4	386	ND		UG/KG	1
Isophorone	58	386	ND		UG/KG	1
2-Nitrophenol	119	386	ND		UG/KG	1
2,4-Dimethylphenol	132	386	ND		UG/KG	1
bis(2-Chloroethoxy)methane	29.1	386	ND		UG/KG	1
2,4-Dichlorophenol	142	386	ND		UG/KG	1
1,2,4-Trichlorobenzene	59.5	386	ND		UG/KG	1
Naphthalene	16	386	ND		UG/KG	1
4-Chloroaniline	88.8	386	ND		UG/KG	1
Hexachlorobutadiene	68	386	ND		UG/KG	1
4-Chloro-3-methylphenol	115	386	ND		UG/KG	1
2-Methylnaphthalene	72.6	386	ND		UG/KG	1
Hexachlorocyclopentadiene	58.8	386	ND		UG/KG	1
2,4,6-Trichlorophenol	124	386	ND		UG/KG	1
2,4,5-Trichlorophenol	131	386	ND		UG/KG	1
2-Chloronaphthalene	57.1	386	ND		UG/KG	1
2-Nitroaniline	60	386	ND		UG/KG	1
Dimethylphthalate	24.2	386	ND		UG/KG	1
2,6-Dinitrotoluene	49.5	386	ND		UG/KG	1

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Lab Report No: 301101 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-005-02-EBT	ARDL Lab No.:	301101-01 (cont'd)
Desc/Location:	NONE	Lab Filename:	Z3980
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1051	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/04/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	14.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	44.7	386	ND		UG/KG	1
2,4-Dinitrophenol	119	386	ND		UG/KG	1
4-Nitrophenol	105	386	ND		UG/KG	1
Dibenzofuran	78.2	386	ND		UG/KG	1
2,4-Dinitrotoluene	57.4	386	ND		UG/KG	1
Diethylphthalate	16.8	386	ND		UG/KG	1
4-Chlorophenyl-phenylether	25.1	386	ND		UG/KG	1
4-Nitroaniline	46.8	386	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	104	386	ND		UG/KG	1
N-Nitrosodiphenylamine	24.2	386	ND		UG/KG	1
4-Bromophenyl-phenylether	28.7	386	ND		UG/KG	1
Hexachlorobenzene	48.5	386	ND		UG/KG	1
Pentachlorophenol	96.8	386	ND		UG/KG	1
Di-n-butylphthalate	30.9	386	ND		UG/KG	1
Butylbenzylphthalate	23.7	386	ND		UG/KG	1
3,3'-Dichlorobenzidine	159	386	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	25.7	386	155	J	UG/KG	1
Di-n-octylphthalate	51.5	386	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	76%
Phenol-d5	24-113	90%
Nitrobenzene-d5	23-120	89%
2-Fluorobiphenyl	30-115	75%
2,4,6-Tribromophenol	19-122	53%
Terphenyl-d14	18-137	82%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
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Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-006-02-EBT	ARDL Lab No.:	301101-02
Desc/Location:	NONE	Lab Filename:	Z3983
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/04/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	15.8	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	135	392	ND		UG/KG	1
bis(2-Chloroethyl)ether	28.6	392	ND		UG/KG	1
2-Chlorophenol	125	392	ND		UG/KG	1
1,3-Dichlorobenzene	63.4	392	ND		UG/KG	1
1,4-Dichlorobenzene	50.6	392	ND		UG/KG	1
1,2-Dichlorobenzene	57.6	392	ND		UG/KG	1
2-Methylphenol	111	392	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	22.7	392	ND		UG/KG	1
4-Methylphenol	141	392	ND		UG/KG	1
N-Nitroso-di-n-propylamine	26.8	392	ND		UG/KG	1
Hexachloroethane	58.6	392	ND		UG/KG	1
Nitrobenzene	73.5	392	ND		UG/KG	1
Isophorone	58.9	392	ND		UG/KG	1
2-Nitrophenol	121	392	ND		UG/KG	1
2,4-Dimethylphenol	134	392	ND		UG/KG	1
bis(2-Chloroethoxy)methane	29.6	392	ND		UG/KG	1
2,4-Dichlorophenol	144	392	ND		UG/KG	1
1,2,4-Trichlorobenzene	60.5	392	ND		UG/KG	1
Naphthalene	16.3	392	ND		UG/KG	1
4-Chloroaniline	90.1	392	ND		UG/KG	1
Hexachlorobutadiene	69	392	ND		UG/KG	1
4-Chloro-3-methylphenol	117	392	ND		UG/KG	1
2-Methylnaphthalene	73.8	392	ND		UG/KG	1
Hexachlorocyclopentadiene	59.7	392	ND		UG/KG	1
2,4,6-Trichlorophenol	126	392	ND		UG/KG	1
2,4,5-Trichlorophenol	133	392	ND		UG/KG	1
2-Chloronaphthalene	58	392	ND		UG/KG	1
2-Nitroaniline	60.9	392	ND		UG/KG	1
Dimethylphthalate	24.6	392	ND		UG/KG	1
2,6-Dinitrotoluene	50.2	392	ND		UG/KG	1

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Lab Report No: 301101 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-006-02-EBT	ARDL Lab No.:	301101-02 (cont'd)
Desc/Location:	NONE	Lab Filename:	Z3983
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/04/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	15.8	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	45.4	392	ND		UG/KG	1
2,4-Dinitrophenol	121	392	ND		UG/KG	1
4-Nitrophenol	107	392	ND		UG/KG	1
Dibenzofuran	79.5	392	ND		UG/KG	1
2,4-Dinitrotoluene	58.3	392	ND		UG/KG	1
Diethylphthalate	17.1	392	ND		UG/KG	1
4-Chlorophenyl-phenylether	25.5	392	ND		UG/KG	1
4-Nitroaniline	47.5	392	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	106	392	ND		UG/KG	1
N-Nitrosodiphenylamine	24.6	392	ND		UG/KG	1
4-Bromophenyl-phenylether	29.1	392	ND		UG/KG	1
Hexachlorobenzene	49.3	392	ND		UG/KG	1
Pentachlorophenol	98.3	392	ND		UG/KG	1
Di-n-butylphthalate	31.4	392	ND		UG/KG	1
Butylbenzylphthalate	24.1	392	ND		UG/KG	1
3,3'-Dichlorobenzidine	162	392	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	26.1	392	775		UG/KG	1
Di-n-octylphthalate	52.3	392	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	77%
Phenol-d5	24-113	91%
Nitrobenzene-d5	23-120	94%
2-Fluorobiphenyl	30-115	77%
2,4,6-Tribromophenol	19-122	51%
Terphenyl-d14	18-137	76%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Lab Report No: 301101 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-008-02-EBT	ARDL Lab No.:	301101-04
Desc/Location:	NONE	Lab Filename:	Z4012
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/09/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	15.6	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	135	391	ND		UG/KG	1
bis(2-Chloroethyl)ether	28.6	391	ND		UG/KG	1
2-Chlorophenol	124	391	ND		UG/KG	1
1,3-Dichlorobenzene	63.3	391	ND		UG/KG	1
1,4-Dichlorobenzene	50.5	391	ND		UG/KG	1
1,2-Dichlorobenzene	57.5	391	ND		UG/KG	1
2-Methylphenol	111	391	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	22.6	391	ND		UG/KG	1
4-Methylphenol	141	391	ND		UG/KG	1
N-Nitroso-di-n-propylamine	26.8	391	ND		UG/KG	1
Hexachloroethane	58.4	391	ND		UG/KG	1
Nitrobenzene	73.3	391	ND		UG/KG	1
Isophorone	58.8	391	ND		UG/KG	1
2-Nitrophenol	121	391	ND		UG/KG	1
2,4-Dimethylphenol	134	391	ND		UG/KG	1
bis(2-Chloroethoxy)methane	29.5	391	ND		UG/KG	1
2,4-Dichlorophenol	143	391	ND		UG/KG	1
1,2,4-Trichlorobenzene	60.3	391	ND		UG/KG	1
Naphthalene	16.2	391	ND		UG/KG	1
4-Chloroaniline	89.9	391	ND		UG/KG	1
Hexachlorobutadiene	68.8	391	ND		UG/KG	1
4-Chloro-3-methylphenol	117	391	ND		UG/KG	1
2-Methylnaphthalene	73.6	391	ND		UG/KG	1
Hexachlorocyclopentadiene	59.6	391	ND		UG/KG	1
2,4,6-Trichlorophenol	126	391	ND		UG/KG	1
2,4,5-Trichlorophenol	133	391	ND		UG/KG	1
2-Chloronaphthalene	57.8	391	ND		UG/KG	1
2-Nitroaniline	60.8	391	ND		UG/KG	1
Dimethylphthalate	24.5	391	ND		UG/KG	1
2,6-Dinitrotoluene	50.1	391	ND		UG/KG	1

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Lab Report No: 301101 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-008-02-EBT	ARDL Lab No.:	301101-04 (cont'd)
Desc/Location:	NONE	Lab Filename:	Z4012
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/09/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	15.6	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	45.3	391	ND		UG/KG	1
2,4-Dinitrophenol	121	391	ND		UG/KG	1
4-Nitrophenol	106	391	ND		UG/KG	1
Dibenzofuran	79.3	391	ND		UG/KG	1
2,4-Dinitrotoluene	58.2	391	ND		UG/KG	1
Diethylphthalate	17.1	391	ND		UG/KG	1
4-Chlorophenyl-phenylether	25.5	391	ND		UG/KG	1
4-Nitroaniline	47.4	391	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	106	391	ND		UG/KG	1
N-Nitrosodiphenylamine	24.5	391	ND		UG/KG	1
4-Bromophenyl-phenylether	29	391	ND		UG/KG	1
Hexachlorobenzene	49.2	391	ND		UG/KG	1
Pentachlorophenol	98.1	391	ND		UG/KG	1
Di-n-butylphthalate	31.3	391	ND		UG/KG	1
Butylbenzylphthalate	24.1	391	ND		UG/KG	1
3,3'-Dichlorobenzidine	161	391	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	26.1	391	621		UG/KG	1
Di-n-octylphthalate	52.1	391	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	56%
Phenol-d5	24-113	65%
Nitrobenzene-d5	23-120	49%
2-Fluorobiphenyl	30-115	63%
2,4,6-Tribromophenol	19-122	82%
Terphenyl-d14	18-137	92%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 10/11/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-003-02-ESW	ARDL Lab No.:	301101-05
Desc/Location:	NONE	Lab Filename:	Z4013
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/09/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	14.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	133	385	ND		UG/KG	1
bis(2-Chloroethyl)ether	28.1	385	ND		UG/KG	1
2-Chlorophenol	123	385	ND		UG/KG	1
1,3-Dichlorobenzene	62.3	385	ND		UG/KG	1
1,4-Dichlorobenzene	49.7	385	ND		UG/KG	1
1,2-Dichlorobenzene	56.6	385	ND		UG/KG	1
2-Methylphenol	109	385	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	22.3	385	ND		UG/KG	1
4-Methylphenol	139	385	ND		UG/KG	1
N-Nitroso-di-n-propylamine	26.4	385	ND		UG/KG	1
Hexachloroethane	57.5	385	ND		UG/KG	1
Nitrobenzene	72.2	385	ND		UG/KG	1
Isophorone	57.9	385	ND		UG/KG	1
2-Nitrophenol	119	385	ND		UG/KG	1
2,4-Dimethylphenol	132	385	ND		UG/KG	1
bis(2-Chloroethoxy)methane	29.1	385	ND		UG/KG	1
2,4-Dichlorophenol	141	385	ND		UG/KG	1
1,2,4-Trichlorobenzene	59.4	385	ND		UG/KG	1
Naphthalene	16	385	ND		UG/KG	1
4-Chloroaniline	88.6	385	ND		UG/KG	1
Hexachlorobutadiene	67.8	385	ND		UG/KG	1
4-Chloro-3-methylphenol	115	385	ND		UG/KG	1
2-Methylnaphthalene	72.5	385	ND		UG/KG	1
Hexachlorocyclopentadiene	58.7	385	ND		UG/KG	1
2,4,6-Trichlorophenol	124	385	ND		UG/KG	1
2,4,5-Trichlorophenol	131	385	ND		UG/KG	1
2-Chloronaphthalene	56.9	385	ND		UG/KG	1
2-Nitroaniline	59.9	385	ND		UG/KG	1
Dimethylphthalate	24.2	385	ND		UG/KG	1
2,6-Dinitrotoluene	49.4	385	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 10/11/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-003-02-ESW	ARDL Lab No.:	301101-05 (cont'd)
Desc/Location:	NONE	Lab Filename:	Z4013
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/09/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	14.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	44.6	385	ND		UG/KG	1
2,4-Dinitrophenol	119	385	ND		UG/KG	1
4-Nitrophenol	105	385	ND		UG/KG	1
Dibenzofuran	78.1	385	ND		UG/KG	1
2,4-Dinitrotoluene	57.3	385	ND		UG/KG	1
Diethylphthalate	16.8	385	ND		UG/KG	1
4-Chlorophenyl-phenylether	25.1	385	ND		UG/KG	1
4-Nitroaniline	46.7	385	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	104	385	ND		UG/KG	1
N-Nitrosodiphenylamine	24.2	385	ND		UG/KG	1
4-Bromophenyl-phenylether	28.6	385	ND		UG/KG	1
Hexachlorobenzene	48.4	385	ND		UG/KG	1
Pentachlorophenol	96.6	385	ND		UG/KG	1
Di-n-butylphthalate	30.8	385	ND		UG/KG	1
Butylbenzylphthalate	23.7	385	ND		UG/KG	1
3,3'-Dichlorobenzidine	159	385	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	25.7	385	69.1	J	UG/KG	1
Di-n-octylphthalate	51.3	385	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	53%
Phenol-d5	24-113	70%
Nitrobenzene-d5	23-120	65%
2-Fluorobiphenyl	30-115	70%
2,4,6-Tribromophenol	19-122	77%
Terphenyl-d14	18-137	87%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

PCB's-8082

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/24/2002

Project Name:	USACE FT DEARBORN	Analysis:	PCB'S
Project No.:	17297	Analytical Method:	8082
		Prep Method:	3550A

Field ID:	VWR-005-02-EBT	ARDL Lab No.:	301101-01
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1051	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/20/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4998
% Moisture:	14.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	8.7	38.6	ND		UG/KG	1
Aroclor 1221	15.8	78.4	ND		UG/KG	1
Aroclor 1232	9.7	38.6	ND		UG/KG	1
Aroclor 1242	10.9	38.6	ND		UG/KG	1
Aroclor 1248	7.3	38.6	ND		UG/KG	1
Aroclor 1254	5	38.6	ND		UG/KG	1
Aroclor 1260	6.5	38.6	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	75%
Tetrachloro-m-xylene	42-94	69%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/24/2002

Project Name:	USACE FT DEARBORN	Analysis:	PCB'S
Project No.:	17297	Analytical Method:	8082
		Prep Method:	3550A

Field ID:	VWR-006-02-EBT	ARDL Lab No.:	301101-02
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/20/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4998
% Moisture:	15.8	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	8.8	39.2	ND		UG/KG	1
Aroclor 1221	16	79.6	ND		UG/KG	1
Aroclor 1232	9.9	39.2	ND		UG/KG	1
Aroclor 1242	11	39.2	ND		UG/KG	1
Aroclor 1248	7.4	39.2	ND		UG/KG	1
Aroclor 1254	5.1	39.2	ND		UG/KG	1
Aroclor 1260	6.6	39.2	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	79%
Tetrachloro-m-xylene	42-94	73%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	VWR-008-02-EBT	ARDL Lab No.:	301101-04
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/20/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4998
% Moisture:	15.6	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	8.8	39.1	ND		UG/KG	1
Aroclor 1221	16	79.4	ND		UG/KG	1
Aroclor 1232	9.9	39.1	ND		UG/KG	1
Aroclor 1242	11	39.1	ND		UG/KG	1
Aroclor 1248	7.4	39.1	ND		UG/KG	1
Aroclor 1254	5.1	39.1	ND		UG/KG	1
Aroclor 1260	6.5	39.1	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	77%
Tetrachloro-m-xylene	42-94	75%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	VWR-003-02-ESW	ARDL Lab No.:	301101-05
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/20/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4998
% Moisture:	14.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	8.7	38.5	ND		UG/KG	1
Aroclor 1221	15.8	78.2	ND		UG/KG	1
Aroclor 1232	9.7	38.5	ND		UG/KG	1
Aroclor 1242	10.8	38.5	ND		UG/KG	1
Aroclor 1248	7.2	38.5	ND		UG/KG	1
Aroclor 1254	5	38.5	ND		UG/KG	1
Aroclor 1260	6.4	38.5	7.1	J	UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	84%
Tetrachloro-m-xylene	42-94	76%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

PAH-8270 SIM

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-005-02-EBT	ARDL Lab No.:	301101-01
Desc/Location:	NONE	Lab Filename:	Z3793
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1051	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/24/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5001
% Moisture:	14.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.3	11.7	ND		UG/KG	1
Acenaphthylene	2.8	11.7	ND		UG/KG	1
Acenaphthene	3.2	11.7	ND		UG/KG	1
Fluorene	2.7	11.7	ND		UG/KG	1
Phenanthrene	3	11.7	8.9	J	UG/KG	1
Anthracene	2.3	11.7	ND		UG/KG	1
Fluoranthene	3	11.7	15.3		UG/KG	1
Pyrene	2.2	11.7	20.7		UG/KG	1
Benzo(a)anthracene	2.3	11.7	9.2	J	UG/KG	1
Chrysene	2.8	11.7	11.3	J	UG/KG	1
Benzo(b)fluoranthene	2.8	11.7	9.5	J	UG/KG	1
Benzo(k)fluoranthene	4.3	11.7	6.2	J	UG/KG	1
Benzo(a)pyrene	2.6	11.7	7.5	J	UG/KG	1
Indeno(1,2,3-cd)pyrene	2.7	11.7	5.9	J	UG/KG	1
Dibenzo(a,h)anthracene	2.6	11.7	ND		UG/KG	1
Benzo(g,h,i)perylene	2.8	11.7	6.9	J	UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	71%
Nitrobenzene-d5	23-120	70%
Terphenyl-d14	18-137	95%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 10/11/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-006-02-EBT	ARDL Lab No.:	301101-02
Desc/Location:	NONE	Lab Filename:	Z3779
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/24/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5000
% Moisture:	15.8	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.4	11.9	ND		UG/KG	1
Acenaphthylene	2.8	11.9	ND		UG/KG	1
Acenaphthene	3.3	11.9	ND		UG/KG	1
Fluorene	2.8	11.9	ND		UG/KG	1
Phenanthrene	3	11.9	16.7		UG/KG	1
Anthracene	2.4	11.9	ND		UG/KG	1
Fluoranthene	3.1	11.9	38.0		UG/KG	1
Pyrene	2.2	11.9	48.3		UG/KG	1
Benzo(a)anthracene	2.3	11.9	26.9		UG/KG	1
Chrysene	2.8	11.9	33.6		UG/KG	1
Benzo(b)fluoranthene	2.8	11.9	22.0		UG/KG	1
Benzo(k)fluoranthene	4.4	11.9	23.5		UG/KG	1
Benzo(a)pyrene	2.7	11.9	27.7		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.8	11.9	18.3		UG/KG	1
Dibenzo(a,h)anthracene	2.6	11.9	ND		UG/KG	1
Benzo(g,h,i)perylene	2.8	11.9	22.0		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	74%
Nitrobenzene-d5	23-120	72%
Terphenyl-d14	18-137	85%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 10/11/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-008-02-EBT	ARDL Lab No.:	301101-04
Desc/Location:	NONE	Lab Filename:	Z3796
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5000
% Moisture:	15.6	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.3	11.8	ND		UG/KG	1
Acenaphthylene	2.8	11.8	ND		UG/KG	1
Acenaphthene	3.2	11.8	ND		UG/KG	1
Fluorene	2.8	11.8	ND		UG/KG	1
Phenanthrene	3	11.8	18.7		UG/KG	1
Anthracene	2.4	11.8	ND		UG/KG	1
Fluoranthene	3.1	11.8	34.7		UG/KG	1
Pyrene	2.2	11.8	46.8		UG/KG	1
Benzo(a)anthracene	2.3	11.8	19.8		UG/KG	1
Chrysene	2.8	11.8	26.7		UG/KG	1
Benzo(b)fluoranthene	2.8	11.8	18.9		UG/KG	1
Benzo(k)fluoranthene	4.4	11.8	19.1		UG/KG	1
Benzo(a)pyrene	2.7	11.8	20.3		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.8	11.8	13.9		UG/KG	1
Dibenzo(a,h)anthracene	2.6	11.8	ND		UG/KG	1
Benzo(g,h,i)perylene	2.8	11.8	17.2		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	86%
Nitrobenzene-d5	23-120	80%
Terphenyl-d14	18-137	97%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-003-02-ESW	ARDL Lab No.:	301101-05
Desc/Location:	NONE	Lab Filename:	Z3797
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5000
% Moisture:	14.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.3	11.7	ND		UG/KG	1
Acenaphthylene	2.8	11.7	ND		UG/KG	1
Acenaphthene	3.2	11.7	ND		UG/KG	1
Fluorene	2.7	11.7	ND		UG/KG	1
Phenanthrene	3	11.7	40.7		UG/KG	1
Anthracene	2.3	11.7	7.1	J	UG/KG	1
Fluoranthene	3	11.7	106		UG/KG	1
Pyrene	2.2	11.7	105		UG/KG	1
Benzo(a)anthracene	2.3	11.7	47.1		UG/KG	1
Chrysene	2.8	11.7	66.1		UG/KG	1
Benzo(b)fluoranthene	2.8	11.7	72.4		UG/KG	1
Benzo(k)fluoranthene	4.3	11.7	39.8		UG/KG	1
Benzo(a)pyrene	2.6	11.7	58.8		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.7	11.7	44.9		UG/KG	1
Dibenzo(a,h)anthracene	2.6	11.7	6	J	UG/KG	1
Benzo(g,h,i)perylene	2.8	11.7	48.9		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	73%
Nitrobenzene-d5	23-120	70%
Terphenyl-d14	18-137	93%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

8015M

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/25/2002

Project Name:	USACE FT DEARBORN	Analysis:	MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.:	17297	Analytical Method:	8015
		Prep Method:	NONE

Field ID:	VWR-005-02-EBT	ARDL Lab No.:	301101-01
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1051	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/23/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B4999
% Moisture:	14.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	1.9	11.7	ND		MG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/25/2002

Project Name:	USACE FT DEARBORN	Analysis:	MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.:	17297	Analytical Method:	8015
		Prep Method:	NONE

Field ID:	VWR-006-02-EBT	ARDL Lab No.:	301101-02
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/23/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B4999
% Moisture:	15.8	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	1.9	11.9	ND		MG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/25/2002

Project Name:	USACE FT DEARBORN	Analysis:	MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.:	17297	Analytical Method:	8015
		Prep Method:	NONE

Field ID:	VWR-008-02-EBT	ARDL Lab No.:	301101-04
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/23/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B4999
% Moisture:	15.6	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	1.9	11.8	ND		MG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/25/2002

Project Name:	USACE FT DEARBORN	Analysis:	MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.:	17297	Analytical Method:	8015
		Prep Method:	NONE

Field ID:	VWR-003-02-ESW	ARDL Lab No.:	301101-05
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/23/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B4999
% Moisture:	14.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	1.9	11.7	ND		MG/KG	1

INORGANICS

INORGANIC ANALYSIS DATA PACKAGE

FERGUSON HARBOR

Report Date: 09/27/02

Delivery Order No.: 17297

ARDL Report No.: 301101

Lab Name: ARDL, Inc.
Samples Received at ARDL: 13-Sep-02
Project Name: USACE Ft. Dearborn

CASE NARRATIVE

Sample ID No.	Date Collected	Lab ID No.	Analysis Requested
VWR-005-02-EBT	09/12/02	301101-01	Total Metals(1), Total Solids
VWR-006-02-EBT	09/12/02	301101-02	Total Metals(1), Total Solids
VWR-008-02-EBT	09/12/02	301101-04	Total Metals(1), Total Solids
VWR-003-02-ESW	09/12/02	301101-05	Total Metals(1), Total Solids

(1) Including aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, nickel, potassium, selenium, silver, sodium, thallium, vanadium and zinc.

The quality control data are summarized as follows:

LABORATORY CONTROL SAMPLES
Percent recovery of all LCS analyses were within control limits.

PREPARATION BLANKS
Results of all preparation blanks were within acceptable limits.

MATRIX SPIKES
Percent recovery of all matrix spikes and matrix spike duplicates except 1 of 2 for copper and 2 of 2 for antimony were within control limits. The sample results for aluminum, iron and manganese were greater than 4 times the spike amount; therefore, percent recovery was not considered.

DUPLICATES
RPD on all duplicate analyses except calcium, copper and magnesium were within control limits.
All duplicate analyses are reported as MS/MSD except calcium, magnesium, potassium, sodium and total solids which are reported as sample/duplicate.

Release of the data contained in this package has been authorized by the Technical Services Manager or his designee as verified by the following signature.

Daniel J. Gillespie
Technical Services Manager

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: VWR-005-02-EBT ARDL No: 301101-01
Sampling Loc'n: NONE Received: 09/13/2002
Sampling Date: 09/12/2002 Matrix: SOIL
Sampling Time: 1051 Moisture: 14.5

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	11.7	10500	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Antimony	0.58	0.87	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Arsenic	0.35	12.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Barium	1.2	81.2	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Beryllium	0.12	0.43	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cadmium	0.23	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Calcium	11.7	22600	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Chromium	0.58	17.6	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cobalt	0.58	10.5	MG/KG	3050B	6010B	09/18/02	09/23/02	P399[illegible]
Copper	1.2	38.1	MG/KG	3050B	6010B	09/18/02	09/23/02	P399
Iron	5.8	23900	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Lead	0.35	22.4	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Magnesium	11.7	14400	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Manganese	0.58	439	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Mercury	0.094	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.8	28.2	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Potassium	234	1390	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Selenium	0.58	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Silver	0.58	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Sodium	46.8	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Thallium	0.35	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Vanadium	0.58	22.1	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Zinc	0.58	49.0	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Solids, Percent	1	85.5	%	NONE	160.3	NA	09/13/02	09179442

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: VWR-006-02-EBT ARDL No: 301101-02
Sampling Loc'n: NONE Received: 09/13/2002
Sampling Date: 09/12/2002 Matrix: SOIL
Sampling Time: 1246 Moisture: 15.8

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	11.9	10800	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Antimony	0.59	0.83	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Arsenic	0.36	7.5	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Barium	1.2	103	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Beryllium	0.12	0.51	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cadmium	0.24	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Calcium	11.9	16400	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Chromium	0.59	16.0	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cobalt	0.59	8.4	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Copper	1.2	24.8	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Iron	5.9	18800	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Lead	0.36	21.2	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Magnesium	11.9	9370	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Manganese	0.59	319	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Mercury	0.095	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.8	18.6	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Potassium	238	1260	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Selenium	0.59	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Silver	0.59	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Sodium	47.5	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Thallium	0.36	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Vanadium	0.59	24.1	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Zinc	0.59	49.1	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Solids, Percent	1	84.2	%	NONE	160.3	NA	09/13/02	09179442

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Lab Report No: 301101 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: VWR-008-02-EBT ARDL No: 301101-04
Sampling Loc'n: NONE Received: 09/13/2002
Sampling Date: 09/12/2002 Matrix: SOIL
Sampling Time: 1246 Moisture: 15.6

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	11.8	11400	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Antimony	0.59	0.81	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Arsenic	0.36	8.2	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Barium	1.2	110	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Beryllium	0.12	0.49	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cadmium	0.24	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Calcium	11.8	13500	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Chromium	0.59	16.2	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cobalt	0.59	7.8	MG/KG	3050B	6010B	09/18/02	09/23/02	P399[illegible]
Copper	1.2	25.6	MG/KG	3050B	6010B	09/18/02	09/23/02	P399
Iron	5.9	19300	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Lead	0.36	17.5	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Magnesium	11.8	8360	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Manganese	0.59	347	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Mercury	0.095	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.8	18.2	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Potassium	237	1230	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Selenium	0.59	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Silver	0.59	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Sodium	47.4	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Thallium	0.36	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Vanadium	0.59	24.5	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Zinc	0.59	50.2	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Solids, Percent	1	84.4	%	NONE	160.3	NA	09/13/02	09179442

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Lab Report No: 301101 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: VWR-003-02-ESW ARDL No: 301101-05
Sampling Loc'n: NONE Received: 09/13/2002
Sampling Date: 09/12/2002 Matrix: SOIL
Sampling Time: 1246 Moisture: 14.3

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	11.7	12000	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Antimony	0.58	1.3	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Arsenic	0.35	8.7	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Barium	1.2	109	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Beryllium	0.12	0.57	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cadmium	0.23	0.72	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Calcium	11.7	13400	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Chromium	0.58	20.5	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cobalt	0.58	9	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Copper	1.2	33.5	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Iron	5.8	21500	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Lead	0.35	73.1	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Magnesium	11.7	9050	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Manganese	0.58	627	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Mercury	0.093	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.8	23.4	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Potassium	233	1750	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Selenium	0.58	0.63	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Silver	0.58	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Sodium	46.7	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Thallium	0.35	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Vanadium	0.58	23.5	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Zinc	0.58	71.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Solids, Percent	1	85.7	%	NONE	160.3	NA	09/13/02	09179442

ORGANIC ANALYSIS DATA PACKAGE

Contract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301102 Samples Received at ARDL: 9/13/02

CASE NARRATIVE

VOLATILE FRACTION-METHOD 8260

Soil samples were received by ARDL, Inc. on September 13, 2002, for VOA analysis by GC/MS. All analyses were performed within the method specified holding time.

No unusual problems were encountered during the sample analyses.

SEMIVOLATILE FRACTION - 8270

Soil samples were received by ARDL, Inc. on September 13, 2002 for BNA analysis by GC/MS. All analyses were performed according to low level protocol within method specified holding times.

The spiked blank had high recovery for 4-Nitrophenol. As none was found in the samples, no further action was taken.

No other unusual problems were encountered during the sample extraction or sample analyses.

PNA/SIM FRACTION

Soil samples were received by ARDL, Inc. on September 13, 2002, for PNA-SIM analysis by GC/MS. All analyses were performed according to low level protocol within method specified holding times.

Sample FSS-007-05-EBT required a manual integration for the compound benzo(k)fluoranthene.

No unusual problems were encountered during the sample analyses.

GLYCOL FRACTION - METHOD 8015M

Soil samples were received by ARDL, Inc. on 9/13/02,for Glycol analysis. The samples were extracted within the method specified holding time.

These samples were extracted with ARDL SDG 301101. Therefore, only one blank and spike blank were prepared. Due to software limitations, the blank and spike blank are designated as ARDL SDG 301101, although they are also applicable to ARDL SDG 301102. Additionally, the MS/MSD evaluation was also performed on samples from ARDL SDG 301101. Refer to that data package for results.

No additional problems were encountered during the analysis of these samples.

ORGANIC ANALYSIS DATA PACKAGE

Contract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301102 Samples Received at ARDL: 9/13/02

CASE NARRATIVE (Continued)

PCB FRACTION - METHOD 8082

Soil samples were received by ARDL, Inc. on 9/13/02, for PCB analysis. The samples were extracted within holding time requirements.

The soil samples were cleaned up by acid hydrolysis.

These samples were extracted with ARDL SDG 301101. Therefore, only one blank and spike blank were prepared. Due to software limitations, the blank and spike blank are designated as ARDL SDG 301101, although they are also applicable to ARDL SDG 301102. Additionally, the MS/MSD evaluation was also performed on samples from ARDL SDG 301101. Refer to that data package for results.

The columnsThe columns used for PCB analysis are as follows: Primary column - RTX-CLP PESTICIDE II, 30 meter, 0.32 mm ID, 0.25 mm df; Confirmation column - RTX-CLP PESTICIDES, 30 meter, 0.32 mm ID, 0.50 mm df.

The following pages list manual integrations performed on the data. (See ard copy for explanation of manual integrations):

Pages: 50018-50021
50025-50028
50034-50037
50042-50045
50051-50054
50060-50064
50071-50074
50080-50083
50107-50110
50116-50119
50123-50126

No additional problems were encountered in the analysis of these samples.

ORGANIC DATA REPORTING QUALIFIERS

The following organic data reporting qualifiers are used as required.

ND- Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.

ORGANIC ANALYSIS DATA PACKAGE

Contract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301102 Samples Received at ARDL: 9/13/02

CASE NARRATIVE (Continued)

ORGANIC DATA REPORTING QUALIFIERS (Continued)

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the N code is not used.

P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns.

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, do not apply this flag; instead use a laboratory-defined flag.

B - This flag is used when the analyte is found in the blank as well as the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must by used for a TIC as well as for a positively identified target compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. If one or more compounds have a response greater than full scale, except as noted in Exhibit D, the sample or extract must be diluted and re-analyzed according to the specifications in Exhibit D. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form 1 for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate copies of Form 1. The Form 1 for the diluted sample shall have the "DL" suffix appended to the sample number.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form 1 for the diluted sample, and all concentration values reported on that Form 1 are flagged with the "D" flag.

ORGANIC ANALYSIS DATA PACKAGE

Contract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301102 Samples Received at ARDL: 9/13/02

CASE NARRATIVE (Continued)

ORGANIC DATA REPORTING QUALIFIERS (Continued)

A - This flag indicates that a TIC is a suspected aldol-condensation product.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized for the Laboratory Manager or his designee, as verified by the following signature.

Daniel J. Gillespie
Technical Services Manager

VOA-8260B

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/23/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-004-02-ESW	ARDL Lab No.:	301102-01
Desc/Location:	NONE	Lab Filename:	Y2576
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1330	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0902JFSJ
% Moisture:	17.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	12.1	ND		UG/KG	1
Vinyl Chloride	2.2	12.1	ND		UG/KG	1
Bromomethane	1.6	12.1	ND		UG/KG	1
Chloroethane	1.9	12.1	ND		UG/KG	1
1,1-Dichloroethene	1	6.1	ND		UG/KG	1
Methylene Chloride	2.9	6.1	ND		UG/KG	1
trans-1,2-Dichloroethene	0.96	6.1	ND		UG/KG	1
1,1-Dichloroethane	0.28	6.1	ND		UG/KG	1
Carbon disulfide	1	6.1	ND		UG/KG	1
cis-1,2-Dichloroethene	0.40	6.1	ND		UG/KG	1
Bromochloromethane	0.98	6.1	ND		UG/KG	1
Chloroform	0.82	6.1	ND		UG/KG	1
1,1,1-Trichloroethane	0.38	6.1	ND		UG/KG	1
Carbon Tetrachloride	0.74	6.1	ND		UG/KG	1
Benzene	0.69	6.1	ND		UG/KG	1
1,2-Dichloroethane	0.45	6.1	ND		UG/KG	1
Trichloroethene	1.1	6.1	ND		UG/KG	1
1,2-Dichloropropane	0.41	6.1	ND		UG/KG	1
Bromodichloromethane	0.28	6.1	ND		UG/KG	1
cis-1,3-Dichloropropene	0.79	6.1	ND		UG/KG	1
Toluene	0.38	6.1	ND		UG/KG	1
trans-1,3-Dichloropropene	0.75	6.1	ND		UG/KG	1
1,1,2-Trichloroethane	0.32	6.1	ND		UG/KG	1
Tetrachloroethene	0.57	6.1	ND		UG/KG	1
Dibromochloromethane	0.28	6.1	ND		UG/KG	1
Chlorobenzene	0.25	6.1	ND		UG/KG	1
Ethyl Benzene	0.44	6.1	ND		UG/KG	1
m & p-Xylene	0.97	6.1	ND		UG/KG	1
o-Xylene	1	6.1	ND		UG/KG	1
Styrene	0.42	6.1	ND		UG/KG	1

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Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/23/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No. 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-004-02-ESW	ARDL Lab No.:	301102-01 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2576
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1330	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0920JFSJ
% Moisture:	17.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.27	6.1	ND		UG/KG	1
2-Hexanone	21.8	24.2	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	6.1	ND		UG/KG	1
Acetone	38.8	60.6	ND		UG/KG	1
2-Butanone	20.6	60.6	ND		UG/KG	1
4-Methyl-2-pentanone	18.2	24.2	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	104%
1,2-Dichloroethane-d4	78-135	98%
Toluene-d8	86-129	102%
4-Bromofluorobenzene	76-141	103%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/23/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FSS-005-08-EBT	ARDL Lab No.:	301102-03
Desc/Location:	NONE	Lab Filename:	Y2577
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1605	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0902JFSJ
% Moisture:	19	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	12.3	ND		UG/KG	1
Vinyl Chloride	2.2	12.3	ND		UG/KG	1
Bromomethane	1.6	12.3	ND		UG/KG	1
Chloroethane	2	12.3	ND		UG/KG	1
1,1-Dichloroethene	1	6.2	ND		UG/KG	1
Methylene Chloride	3	6.2	ND		UG/KG	1
trans-1,2-Dichloroethene	0.98	6.2	ND		UG/KG	1
1,1-Dichloroethane	0.28	6.2	ND		UG/KG	1
Carbon disulfide	1.1	6.2	ND		UG/KG	1
cis-1,2-Dichloroethene	0.41	6.2	ND		UG/KG	1
Bromochloromethane	1	6.2	ND		UG/KG	1
Chloroform	0.84	6.2	ND		UG/KG	1
1,1,1-Trichloroethane	0.38	6.2	ND		UG/KG	1
Carbon Tetrachloride	0.75	6.2	ND		UG/KG	1
Benzene	0.7	6.2	ND		UG/KG	1
1,2-Dichloroethane	0.46	6.2	ND		UG/KG	1
Trichloroethene	1.1	6.2	ND		UG/KG	1
1,2-Dichloropropane	0.42	6.2	ND		UG/KG	1
Bromodichloromethane	0.28	6.2	ND		UG/KG	1
cis-1,3-Dichloropropene	0.8	6.2	ND		UG/KG	1
Toluene	0.38	6.2	ND		UG/KG	1
trans-1,3-Dichloropropene	0.77	6.2	ND		UG/KG	1
1,1,2-Trichloroethane	0.32	6.2	ND		UG/KG	1
Tetrachloroethene	0.58	6.2	ND		UG/KG	1
Dibromochloromethane	0.28	6.2	ND		UG/KG	1
Chlorobenzene	0.26	6.2	ND		UG/KG	1
Ethyl Benzene	0.44	6.2	ND		UG/KG	1
m & p-Xylene	0.99	6.2	ND		UG/KG	1
o-Xylene	1.1	6.2	ND		UG/KG	1
Styrene	0.43	6.2	ND		UG/KG	1

ARDL, INC.
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Lab Report No: 301102 Report Date: 09/23/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No. 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FSS-005-08-EBT	ARDL Lab No.:	301102-03 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2577
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1605	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0920JFSJ
% Moisture:	19	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.27	6.2	ND		UG/KG	1
2-Hexanone	22.2	24.7	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.9	6.2	ND		UG/KG	1
Acetone	39.5	61.7	ND		UG/KG	1
2-Butanone	21	61.7	ND		UG/KG	1
4-Methyl-2-pentanone	18.5	24.7	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	115%
1,2-Dichloroethane-d4	78-135	109%
Toluene-d8	86-129	111%
4-Bromofluorobenzene	76-141	108%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Lab Report No: 301102 Report Date: 09/23/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FSS-006-05-EBT	ARDL Lab No.:	301102-04
Desc/Location:	NONE	Lab Filename:	Y2578
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1611	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0902JFSJ
% Moisture:	18	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	12.2	ND		UG/KG	1
Vinyl Chloride	2.2	12.2	ND		UG/KG	1
Bromomethane	1.6	12.2	ND		UG/KG	1
Chloroethane	2	12.2	ND		UG/KG	1
1,1-Dichloroethene	1	6.1	ND		UG/KG	1
Methylene Chloride	2.9	6.1	ND		UG/KG	1
trans-1,2-Dichloroethene	0.96	6.1	ND		UG/KG	1
1,1-Dichloroethane	0.28	6.1	ND		UG/KG	1
Carbon disulfide	1	6.1	ND		UG/KG	1
cis-1,2-Dichloroethene	0.4	6.1	ND		UG/KG	1
Bromochloromethane	0.99	6.1	ND		UG/KG	1
Chloroform	0.83	6.1	ND		UG/KG	1
1,1,1-Trichloroethane	0.38	6.1	ND		UG/KG	1
Carbon Tetrachloride	0.74	6.1	ND		UG/KG	1
Benzene	0.7	6.1	ND		UG/KG	1
1,2-Dichloroethane	0.45	6.1	ND		UG/KG	1
Trichloroethene	1.1	6.1	ND		UG/KG	1
1,2-Dichloropropane	0.41	6.1	ND		UG/KG	1
Bromodichloromethane	0.28	6.1	ND		UG/KG	1
cis-1,3-Dichloropropene	0.79	6.1	ND		UG/KG	1
Toluene	0.38	6.1	ND		UG/KG	1
trans-1,3-Dichloropropene	0.76	6.1	ND		UG/KG	1
1,1,2-Trichloroethane	0.32	6.1	ND		UG/KG	1
Tetrachloroethene	0.57	6.1	ND		UG/KG	1
Dibromochloromethane	0.28	6.1	ND		UG/KG	1
Chlorobenzene	0.26	6.1	ND		UG/KG	1
Ethyl Benzene	0.44	6.1	ND		UG/KG	1
m & p-Xylene	0.98	6.1	ND		UG/KG	1
o-Xylene	1	6.1	ND		UG/KG	1
Styrene	0.43	6.1	ND		UG/KG	1

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Lab Report No: 301102 Report Date: 09/23/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No. 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FSS-006-05-EBT	ARDL Lab No.:	301102-04 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2578
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1611	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0920JFSJ
% Moisture:	18	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.27	6.1	ND		UG/KG	1
2-Hexanone	22	24.4	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	6.1	ND		UG/KG	1
Acetone	39	61.0	ND		UG/KG	1
2-Butanone	20.7	61.0	ND		UG/KG	1
4-Methyl-2-pentanone	18.3	24.4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	124%
1,2-Dichloroethane-d4	78-135	120%
Toluene-d8	86-129	127%
4-Bromofluorobenzene	76-141	127%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Lab Report No: 301102 Report Date: 09/23/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FSS-007-05-EBT	ARDL Lab No.:	301102-05
Desc/Location:	NONE	Lab Filename:	Y2579
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1611	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0902JFSJ
% Moisture:	16.9	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	12.0	ND		UG/KG	1
Vinyl Chloride	2.2	12.0	ND		UG/KG	1
Bromomethane	1.6	12.0	ND		UG/KG	1
Chloroethane	1.9	12.0	ND		UG/KG	1
1,1-Dichloroethene	1	6	ND		UG/KG	1
Methylene Chloride	2.9	6	ND		UG/KG	1
trans-1,2-Dichloroethene	0.95	6	ND		UG/KG	1
1,1-Dichloroethane	0.28	6	ND		UG/KG	1
Carbon disulfide	1	6	ND		UG/KG	1
cis-1,2-Dichloroethene	0.4	6	ND		UG/KG	1
Bromochloromethane	0.97	6	ND		UG/KG	1
Chloroform	0.82	6	ND		UG/KG	1
1,1,1-Trichloroethane	0.37	6	ND		UG/KG	1
Carbon Tetrachloride	0.73	6	ND		UG/KG	1
Benzene	0.69	6	ND		UG/KG	1
1,2-Dichloroethane	0.45	6	ND		UG/KG	1
Trichloroethene	1	6	ND		UG/KG	1
1,2-Dichloropropane	0.41	6	ND		UG/KG	1
Bromodichloromethane	0.28	6	ND		UG/KG	1
cis-1,3-Dichloropropene	0.78	6	ND		UG/KG	1
Toluene	0.37	6	ND		UG/KG	1
trans-1,3-Dichloropropene	0.75	6	ND		UG/KG	1
1,1,2-Trichloroethane	0.31	6	ND		UG/KG	1
Tetrachloroethene	0.57	6	ND		UG/KG	1
Dibromochloromethane	0.28	6	ND		UG/KG	1
Chlorobenzene	0.25	6	ND		UG/KG	1
Ethyl Benzene	0.43	6	ND		UG/KG	1
m & p-Xylene	0.96	6	ND		UG/KG	1
o-Xylene	1	6	ND		UG/KG	1
Styrene	0.42	6	ND		UG/KG	1

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Lab Report No: 301102 Report Date: 09/23/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No. 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FSS-007-05-EBT	ARDL Lab No.:	301102-05 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2579
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1611	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0920JFSJ
% Moisture:	16.9	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.26	6	ND		UG/KG	1
2-Hexanone	21.7	24.1	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	6	ND		UG/KG	1
Acetone	38.5	60.2	ND		UG/KG	1
2-Butanone	20.5	60.2	ND		UG/KG	1
4-Methyl-2-pentanone	18.1	24.1	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	113%
1,2-Dichloroethane-d4	78-135	103%
Toluene-d8	86-129	108%
4-Bromofluorobenzene	76-141	113%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Lab Report No: 301102 Report Date: 09/23/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-002-02-ESW	ARDL Lab No.:	301102-06
Desc/Location:	NONE	Lab Filename:	Y2580
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1715	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0902JFSJ
% Moisture:	13.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.2	11.5	ND		UG/KG	1
Vinyl Chloride	2.1	11.5	ND		UG/KG	1
Bromomethane	1.5	11.5	ND		UG/KG	1
Chloroethane	1.8	11.5	ND		UG/KG	1
1,1-Dichloroethene	0.96	5.8	ND		UG/KG	1
Methylene Chloride	2.8	5.8	ND		UG/KG	1
trans-1,2-Dichloroethene	0.91	5.8	ND		UG/KG	1
1,1-Dichloroethane	0.27	5.8	ND		UG/KG	1
Carbon disulfide	0.99	5.8	ND		UG/KG	1
cis-1,2-Dichloroethene	0.38	5.8	ND		UG/KG	1
Bromochloromethane	0.93	5.8	ND		UG/KG	1
Chloroform	0.78	5.8	ND		UG/KG	1
1,1,1-Trichloroethane	0.36	5.8	ND		UG/KG	1
Carbon Tetrachloride	0.7	5.8	ND		UG/KG	1
Benzene	0.66	5.8	ND		UG/KG	1
1,2-Dichloroethane	0.43	5.8	ND		UG/KG	1
Trichloroethene	1	5.8	ND		UG/KG	1
1,2-Dichloropropane	0.39	5.8	ND		UG/KG	1
Bromodichloromethane	0.27	5.8	ND		UG/KG	1
cis-1,3-Dichloropropene	0.75	5.8	ND		UG/KG	1
Toluene	0.36	5.8	ND		UG/KG	1
trans-1,3-Dichloropropene	0.72	5.8	ND		UG/KG	1
1,1,2-Trichloroethane	0.3	5.8	ND		UG/KG	1
Tetrachloroethene	0.54	5.8	ND		UG/KG	1
Dibromochloromethane	0.27	5.8	ND		UG/KG	1
Chlorobenzene	0.24	5.8	ND		UG/KG	1
Ethyl Benzene	0.42	5.8	ND		UG/KG	1
m & p-Xylene	0.92	5.8	ND		UG/KG	1
o-Xylene	0.99	5.8	ND		UG/KG	1
Styrene	0.4	5.8	ND		UG/KG	1

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Lab Report No: 301102 Report Date: 09/23/2002

Project Name:	USACE FT DEARBORN	Analysis:	VOLATILES, GC/MS (8260)
Project No.	17297	Analytical Method:	8260B
		Prep Method:	5030A

Field ID:	VWR-002-02-ESW	ARDL Lab No.:	301102-06 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2580
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1715	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0920JFSJ
% Moisture:	13.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.25	5.8	ND		UG/KG	1
2-Hexanone	20.8	23.1	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.7	5.8	ND		UG/KG	1
Acetone	36.9	57.7	ND		UG/KG	1
2-Butanone	19.6	57.7	ND		UG/KG	1
4-Methyl-2-pentanone	17.3	23.1	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Recoveries
Dibromofluoromethane	86-125	107%
1,2-Dichloroethane-d4	78-135	103%
Toluene-d8	86-129	104%
4-Bromofluorobenzene	76-141	109%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Lab Report No: 301102 Report Date: 09/23/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-007-04-EBT	ARDL Lab No.:	301102-07
Desc/Location:	NONE	Lab Filename:	Y2581
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1722	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0902JFSJ
% Moisture:	18.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	12.3	ND		UG/KG	1
Vinyl Chloride	2.2	12.3	ND		UG/KG	1
Bromomethane	1.6	12.3	ND		UG/KG	1
Chloroethane	2	12.3	ND		UG/KG	1
1,1-Dichloroethene	1	6.1	ND		UG/KG	1
Methylene Chloride	2.9	6.1	ND		UG/KG	1
trans-1,2-Dichloroethene	0.97	6.1	ND		UG/KG	1
1,1-Dichloroethane	0.28	6.1	ND		UG/KG	1
Carbon disulfide	1.1	6.1	ND		UG/KG	1
cis-1,2-Dichloroethene	0.4	6.1	ND		UG/KG	1
Bromochloromethane	0.99	6.1	ND		UG/KG	1
Chloroform	0.83	6.1	ND		UG/KG	1
1,1,1-Trichloroethane	0.38	6.1	ND		UG/KG	1
Carbon Tetrachloride	0.75	6.1	ND		UG/KG	1
Benzene	0.7	6.1	ND		UG/KG	1
1,2-Dichloroethane	0.45	6.1	ND		UG/KG	1
Trichloroethene	1.1	6.1	ND		UG/KG	1
1,2-Dichloropropane	0.42	6.1	ND		UG/KG	1
Bromodichloromethane	0.28	6.1	ND		UG/KG	1
cis-1,3-Dichloropropene	0.8	6.1	ND		UG/KG	1
Toluene	0.38	6.1	ND		UG/KG	1
trans-1,3-Dichloropropene	0.76	6.1	ND		UG/KG	1
1,1,2-Trichloroethane	0.32	6.1	ND		UG/KG	1
Tetrachloroethene	0.58	6.1	ND		UG/KG	1
Dibromochloromethane	0.28	6.1	ND		UG/KG	1
Chlorobenzene	0.26	6.1	ND		UG/KG	1
Ethyl Benzene	0.44	6.1	ND		UG/KG	1
m & p-Xylene	0.98	6.1	ND		UG/KG	1
o-Xylene	1.1	6.1	ND		UG/KG	1
Styrene	0.43	6.1	ND		UG/KG	1

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Lab Report No: 301102 Report Date: 09/23/2002

Project Name:	USACE FT DEARBORN	Analysis: VOLATILES, GC/MS (8260)	
Project No.	17297	Analytical Method: 8260B	
		Prep Method: 5030A	

Field ID:	VWR-007-04-EBT	ARDL Lab No.:	301102-07 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2581
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1722	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0920JFSJ
% Moisture:	18.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.27	6.1	ND		UG/KG	1
2-Hexanone	22.1	24.5	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	6.1	ND		UG/KG	1
Acetone	39.2	61.3	ND		UG/KG	1
2-Butanone	20.8	61.3	ND		UG/KG	1
4-Methyl-2-pentanone	18.4	24.5	ND		UG/KG	1

SURROGATE RECOVERIES:	[illegible]	[illegible]
Dibromofluoromethane	86-125	108%
1,2-Dichloroethane-d4	78-135	102%
Toluene-d8	86-129	104%
4-Bromofluorobenzene	76-141	102%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Lab Report No: 301102 Report Date: 10/08/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-001-03-EBT	ARDL Lab No.:	301102-08
Desc/Location:	NONE	Lab Filename:	Y2582
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1730	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0902JFSJ
% Moisture:	20.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.4	12.5	ND		UG/KG	1
Vinyl Chloride	2.3	12.5	ND		UG/KG	1
Bromomethane	1.6	12.5	ND		UG/KG	1
Chloroethane	2	12.5	ND		UG/KG	1
1,1-Dichloroethene	1	6.3	ND		UG/KG	1
Methylene Chloride	3	6.3	ND		UG/KG	1
trans-1,2-Dichloroethene	0.99	6.3	ND		UG/KG	1
1,1-Dichloroethane	0.29	6.3	ND		UG/KG	1
Carbon disulfide	1.1	6.3	ND		UG/KG	1
cis-1,2-Dichloroethene	0.41	6.3	ND		UG/KG	1
Bromochloromethane	1	6.3	ND		UG/KG	1
Chloroform	0.85	6.3	ND		UG/KG	1
1,1,1-Trichloroethane	0.39	6.3	ND		UG/KG	1
Carbon Tetrachloride	0.77	6.3	ND		UG/KG	1
Benzene	0.72	6.3	ND		UG/KG	1
1,2-Dichloroethane	0.46	6.3	ND		UG/KG	1
Trichloroethene	1.1	6.3	ND		UG/KG	1
1,2-Dichloropropane	0.43	6.3	ND		UG/KG	1
Bromodichloromethane	0.29	6.3	ND		UG/KG	1
cis-1,3-Dichloropropene	0.82	6.3	ND		UG/KG	1
Toluene	0.39	6.3	ND		UG/KG	1
trans-1,3-Dichloropropene	0.78	6.3	ND		UG/KG	1
1,1,2-Trichloroethane	0.33	6.3	ND		UG/KG	1
Tetrachloroethene	0.59	6.3	ND		UG/KG	1
Dibromochloromethane	0.29	6.3	ND		UG/KG	1
Chlorobenzene	0.26	6.3	ND		UG/KG	1
Ethyl Benzene	0.45	6.3	ND		UG/KG	1
m & p-Xylene	1	6.3	ND		UG/KG	1
o-Xylene	1.1	6.3	ND		UG/KG	1
Styrene	0.44	6.3	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/08/2002

Project Name:	USACE FT DEARBORN	Analysis: VOLATILES, GC/MS (8260)	
Project No.	17297	Analytical Method: 8260B	
		Prep Method: 5030A	

Field ID:	VWR-001-03-EBT	ARDL Lab No.:	301102-08(cont'd)
Desc/Location:	NONE	Lab Filename:	Y2582
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1730	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0920JFSJ
% Moisture:	20.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.28	6.3	ND		UG/KG	1
2-Hexanone	22.6	25.1	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.9	6.3	ND		UG/KG	1
Acetone	40.2	62.7	ND		UG/KG	1
2-Butanone	21.3	62.7	ND		UG/KG	1
4-Methyl-2-pentanone	18.8	25.1	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Recovery
Dibromofluoromethane	86-125	110%
1,2-Dichloroethane-d4	78-135	105%
Toluene-d8	86-129	109%
4-Bromofluorobenzene	76-141	108%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

BNA-8270

ARDL, INC.
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Lab Report No: 301102 Report Date: 10/11/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-004-02-ESW	ARDL Lab No.:	301102-01
Desc/Location:	NONE	Lab Filename:	Z4014
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1330	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/09/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	17.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	138	400	ND		UG/KG	1
bis(2-Chloroethyl)ether	29.2	400	ND		UG/KG	1
2-Chlorophenol	127	400	ND		UG/KG	1
1,3-Dichlorobenzene	64.7	400	ND		UG/KG	1
1,4-Dichlorobenzene	51.6	400	ND		UG/KG	1
1,2-Dichlorobenzene	58.8	400	ND		UG/KG	1
2-Methylphenol	114	400	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	23.2	400	ND		UG/KG	1
4-Methylphenol	144	400	ND		UG/KG	1
N-Nitroso-di-n-propylamine	27.4	400	ND		UG/KG	1
Hexachloroethane	59.8	400	ND		UG/KG	1
Nitrobenzene	75	400	ND		UG/KG	1
Isophorone	60.1	400	ND		UG/KG	1
2-Nitrophenol	124	400	ND		UG/KG	1
2,4-Dimethylphenol	137	400	ND		UG/KG	1
bis(2-Chloroethoxy)methane	30.2	400	ND		UG/KG	1
2,4-Dichlorophenol	147	400	ND		UG/KG	1
1,2,4-Trichlorobenzene	61.7	400	ND		UG/KG	1
Naphthalene	16.6	400	ND		UG/KG	1
4-Chloroaniline	92	400	ND		UG/KG	1
Hexachlorobutadiene	70.4	400	ND		UG/KG	1
4-Chloro-3-methylphenol	119	400	ND		UG/KG	1
2-Methylnaphthalene	75.3	400	ND		UG/KG	1
Hexachlorocyclopentadiene	61	400	ND		UG/KG	1
2,4,6-Trichlorophenol	128	400	ND		UG/KG	1
2,4,5-Trichlorophenol	136	400	ND		UG/KG	1
2-Chloronaphthalene	59.2	400	ND		UG/KG	1
2-Nitroaniline	62.2	400	ND		UG/KG	1
Dimethylphthalate	25.1	400	ND		UG/KG	1
2,6-Dinitrotoluene	51.3	400	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/11/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-004-02-ESW	ARDL Lab No.:	301102-01 (cont'd)
Desc/Location:	NONE	Lab Filename:	Z4014
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1330	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/09/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	17.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	46.3	400	ND		UG/KG	1
2,4-Dinitrophenol	124	400	ND		UG/KG	1
4-Nitrophenol	109	400	ND		UG/KG	1
Dibenzofuran	81.1	400	ND		UG/KG	1
2,4-Dinitrotoluene	59.5	400	ND		UG/KG	1
Diethylphthalate	17.5	400	ND		UG/KG	1
4-Chlorophenyl-phenylether	26.1	400	ND		UG/KG	1
4-Nitroaniline	48.5	400	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	108	400	ND		UG/KG	1
N-Nitrosodiphenylamine	25.1	400	ND		UG/KG	1
4-Bromophenyl-phenylether	29.7	400	ND		UG/KG	1
Hexachlorobenzene	50.3	400	ND		UG/KG	1
Pentachlorophenol	100	400	ND		UG/KG	1
Di-n-butylphthalate	32	400	ND		UG/KG	1
Butylbenzylphthalate	24.6	400	ND		UG/KG	1
3,3'-Dichlorobenzidine	165	400	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	26.7	400	ND		UG/KG	1
Di-n-octylphthalate	53.3	400	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	58%
Phenol-d5	24-113	71%
Nitrobenzene-d5	23-120	71%
2-Fluorobiphenyl	30-115	76%
2,4,6-Tribromophenol	19-122	85%
Terphenyl-d14	18-137	87%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
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Lab Report No: 301102 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-005-08-EBT	ARDL Lab No.:	301102-03
Desc/Location:	NONE	Lab Filename:	Z4015
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1605	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	19	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	141	407	ND		UG/KG	1
bis(2-Chloroethyl)ether	29.8	407	ND		UG/KG	1
2-Chlorophenol	130	407	ND		UG/KG	1
1,3-Dichlorobenzene	65.9	407	ND		UG/KG	1
1,4-Dichlorobenzene	52.6	407	ND		UG/KG	1
1,2-Dichlorobenzene	59.9	407	ND		UG/KG	1
2-Methylphenol	116	407	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	23.6	407	ND		UG/KG	1
4-Methylphenol	147	407	ND		UG/KG	1
N-Nitroso-di-n-propylamine	27.9	407	ND		UG/KG	1
Hexachloroethane	60.9	407	ND		UG/KG	1
Nitrobenzene	76.4	407	ND		UG/KG	1
Isophorone	61.2	407	ND		UG/KG	1
2-Nitrophenol	126	407	ND		UG/KG	1
2,4-Dimethylphenol	140	407	ND		UG/KG	1
bis(2-Chloroethoxy)methane	30.7	407	ND		UG/KG	1
2,4-Dichlorophenol	149	407	ND		UG/KG	1
1,2,4-Trichlorobenzene	62.8	407	ND		UG/KG	1
Naphthalene	16.9	407	ND		UG/KG	1
4-Chloroaniline	93.7	407	ND		UG/KG	1
Hexachlorobutadiene	71.7	407	ND		UG/KG	1
4-Chloro-3-methylphenol	122	407	ND		UG/KG	1
2-Methylnaphthalene	76.7	407	ND		UG/KG	1
Hexachlorocyclopentadiene	62.1	407	ND		UG/KG	1
2,4,6-Trichlorophenol	131	407	ND		UG/KG	1
2,4,5-Trichlorophenol	138	407	ND		UG/KG	1
2-Chloronaphthalene	60.2	407	ND		UG/KG	1
2-Nitroaniline	63.3	407	ND		UG/KG	1
Dimethylphthalate	25.6	407	ND		UG/KG	1
2,6-Dinitrotoluene	52.2	407	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-005-08-EBT	ARDL Lab No.:	301102-03 (cont'd)
Desc/Location:	NONE	Lab Filename:	Z4015
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1605	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	19	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	47.2	407	ND		UG/KG	1
2,4-Dinitrophenol	126	407	ND		UG/KG	1
4-Nitrophenol	111	407	ND		UG/KG	1
Dibenzofuran	82.6	407	ND		UG/KG	1
2,4-Dinitrotoluene	60.6	407	ND		UG/KG	1
Diethylphthalate	17.8	407	ND		UG/KG	1
4-Chlorophenyl-phenylether	26.5	407	ND		UG/KG	1
4-Nitroaniline	49.4	407	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	110	407	ND		UG/KG	1
N-Nitrosodiphenylamine	25.6	407	ND		UG/KG	1
4-Bromophenyl-phenylether	30.2	407	ND		UG/KG	1
Hexachlorobenzene	51.2	407	ND		UG/KG	1
Pentachlorophenol	102	407	ND		UG/KG	1
Di-n-butylphthalate	32.6	407	ND		UG/KG	1
Butylbenzylphthalate	25.1	407	1310		UG/KG	1
3,3'-Dichlorobenzidine	168	407	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	27.2	407	ND		UG/KG	1
Di-n-octylphthalate	54.3	407	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	49%
Phenol-d5	24-113	55%
Nitrobenzene-d5	23-120	48%
2-Fluorobiphenyl	30-115	61%
2,4,6-Tribromophenol	19-122	85%
Terphenyl-d14	18-137	86%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
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Lab Report No: 301102 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-006-05-EBT	ARDL Lab No.:	301102-04
Desc/Location:	NONE	Lab Filename:	Z4016
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1611	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	18	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	139	402	ND		UG/KG	1
bis(2-Chloroethyl)ether	29.4	402	ND		UG/KG	1
2-Chlorophenol	128	402	ND		UG/KG	1
1,3-Dichlorobenzene	65.1	402	ND		UG/KG	1
1,4-Dichlorobenzene	52	402	ND		UG/KG	1
1,2-Dichlorobenzene	59.1	402	ND		UG/KG	1
2-Methylphenol	114	402	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	23.3	402	ND		UG/KG	1
4-Methylphenol	145	402	ND		UG/KG	1
N-Nitroso-di-n-propylamine	27.6	402	ND		UG/KG	1
Hexachloroethane	60.1	402	ND		UG/KG	1
Nitrobenzene	75.5	402	ND		UG/KG	1
Isophorone	60.5	402	ND		UG/KG	1
2-Nitrophenol	124	402	ND		UG/KG	1
2,4-Dimethylphenol	138	402	ND		UG/KG	1
bis(2-Chloroethoxy)methane	30.4	402	ND		UG/KG	1
2,4-Dichlorophenol	148	402	ND		UG/KG	1
1,2,4-Trichlorobenzene	62.1	402	ND		UG/KG	1
Naphthalene	16.7	402	ND		UG/KG	1
4-Chloroaniline	92.6	402	ND		UG/KG	1
Hexachlorobutadiene	70.9	402	ND		UG/KG	1
4-Chloro-3-methylphenol	120	402	ND		UG/KG	1
2-Methylnaphthalene	75.7	402	ND		UG/KG	1
Hexachlorocyclopentadiene	61.3	402	ND		UG/KG	1
2,4,6-Trichlorophenol	129	402	ND		UG/KG	1
2,4,5-Trichlorophenol	137	402	ND		UG/KG	1
2-Chloronaphthalene	59.5	402	ND		UG/KG	1
2-Nitroaniline	62.6	402	ND		UG/KG	1
Dimethylphthalate	25.2	402	ND		UG/KG	1
2,6-Dinitrotoluene	51.6	402	ND		UG/KG	1

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Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-006-05-EBT	ARDL Lab No.:	301102-04 (cont'd)
Desc/Location:	NONE	Lab Filename:	Z4016
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1611	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	18	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	46.6	402	ND		UG/KG	1
2,4-Dinitrophenol	124	402	ND		UG/KG	1
4-Nitrophenol	110	402	ND		UG/KG	1
Dibenzofuran	81.6	402	ND		UG/KG	1
2,4-Dinitrotoluene	59.9	402	ND		UG/KG	1
Diethylphthalate	17.6	402	ND		UG/KG	1
4-Chlorophenyl-phenylether	26.2	402	ND		UG/KG	1
4-Nitroaniline	48.8	402	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	109	402	ND		UG/KG	1
N-Nitrosodiphenylamine	25.2	402	ND		UG/KG	1
4-Bromophenyl-phenylether	29.9	402	ND		UG/KG	1
Hexachlorobenzene	50.6	402	ND		UG/KG	1
Pentachlorophenol	101	402	ND		UG/KG	1
Di-n-butylphthalate	32.2	402	ND		UG/KG	1
Butylbenzylphthalate	24.8	402	123	J	UG/KG	1
3,3'-Dichlorobenzidine	166	402	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	26.8	402	ND		UG/KG	1
Di-n-octylphthalate	53.7	402	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	59%
Phenol-d5	24-113	65%
Nitrobenzene-d5	23-120	56%
2-Fluorobiphenyl	30-115	62%
2,4,6-Tribromophenol	19-122	78%
Terphenyl-d14	18-137	82%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
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Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-007-05-EBT	ARDL Lab No.:	301102-05
Desc/Location:	NONE	Lab Filename:	Z4017
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1611	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	16.9	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	137	397	ND		UG/KG	1
bis(2-Chloroethyl)ether	29	397	ND		UG/KG	1
2-Chlorophenol	126	397	ND		UG/KG	1
1,3-Dichlorobenzene	64.3	397	ND		UG/KG	1
1,4-Dichlorobenzene	51.3	397	ND		UG/KG	1
1,2-Dichlorobenzene	58.4	397	ND		UG/KG	1
2-Methylphenol	113	397	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	23	397	ND		UG/KG	1
4-Methylphenol	143	397	ND		UG/KG	1
N-Nitroso-di-n-propylamine	27.2	397	ND		UG/KG	1
Hexachloroethane	59.3	397	ND		UG/KG	1
Nitrobenzene	74.5	397	ND		UG/KG	1
Isophorone	59.7	397	ND		UG/KG	1
2-Nitrophenol	123	397	ND		UG/KG	1
2,4-Dimethylphenol	136	397	ND		UG/KG	1
bis(2-Chloroethoxy)methane	30	397	ND		UG/KG	1
2,4-Dichlorophenol	146	397	ND		UG/KG	1
1,2,4-Trichlorobenzene	61.3	397	ND		UG/KG	1
Naphthalene	16.5	397	ND		UG/KG	1
4-Chloroaniline	91.3	397	ND		UG/KG	1
Hexachlorobutadiene	69.9	397	ND		UG/KG	1
4-Chloro-3-methylphenol	119	397	ND		UG/KG	1
2-Methylnaphthalene	74.7	397	ND		UG/KG	1
Hexachlorocyclopentadiene	60.5	397	ND		UG/KG	1
2,4,6-Trichlorophenol	128	397	ND		UG/KG	1
2,4,5-Trichlorophenol	135	397	ND		UG/KG	1
2-Chloronaphthalene	58.7	397	ND		UG/KG	1
2-Nitroaniline	61.7	397	ND		UG/KG	1
Dimethylphthalate	24.9	397	ND		UG/KG	1
2,6-Dinitrotoluene	50.9	397	ND		UG/KG	1

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Lab Report No: 301102 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-007-05-EBT	ARDL Lab No.:	301102-05 (cont'd)
Desc/Location:	NONE	Lab Filename:	Z4017
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1611	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	16.9	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	46	397	ND		UG/KG	1
2,4-Dinitrophenol	123	397	ND		UG/KG	1
4-Nitrophenol	108	397	ND		UG/KG	1
Dibenzofuran	80.5	397	ND		UG/KG	1
2,4-Dinitrotoluene	59.1	397	ND		UG/KG	1
Diethylphthalate	17.3	397	ND		UG/KG	1
4-Chlorophenyl-phenylether	25.9	397	ND		UG/KG	1
4-Nitroaniline	48.1	397	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	107	397	ND		UG/KG	1
N-Nitrosodiphenylamine	24.9	397	ND		UG/KG	1
4-Bromophenyl-phenylether	29.5	397	ND		UG/KG	1
Hexachlorobenzene	49.9	397	ND		UG/KG	1
Pentachlorophenol	99.6	397	ND		UG/KG	1
Di-n-butylphthalate	31.8	397	64.3	J	UG/KG	1
Butylbenzylphthalate	24.4	397	274	J	UG/KG	1
3,3'-Dichlorobenzidine	164	397	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	26.5	397	ND		UG/KG	1
Di-n-octylphthalate	52.9	397	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	46%
Phenol-d5	24-113	59%
Nitrobenzene-d5	23-120	50%
2-Fluorobiphenyl	30-115	58%
2,4,6-Tribromophenol	19-122	56%
Terphenyl-d14	18-137	78%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-002-02-ESW	ARDL Lab No.:	301102-06
Desc/Location:	NONE	Lab Filename:	Z4018
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1715	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	13.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	131	381	ND		UG/KG	1
bis(2-Chloroethyl)ether	27.8	381	ND		UG/KG	1
2-Chlorophenol	121	381	ND		UG/KG	1
1,3-Dichlorobenzene	61.6	381	ND		UG/KG	1
1,4-Dichlorobenzene	49.1	381	ND		UG/KG	1
1,2-Dichlorobenzene	55.9	381	ND		UG/KG	1
2-Methylphenol	108	381	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	22	381	ND		UG/KG	1
4-Methylphenol	137	381	ND		UG/KG	1
N-Nitroso-di-n-propylamine	26.1	381	ND		UG/KG	1
Hexachloroethane	56.9	381	ND		UG/KG	1
Nitrobenzene	71.4	381	ND		UG/KG	1
Isophorone	57.2	381	ND		UG/KG	1
2-Nitrophenol	118	381	ND		UG/KG	1
2,4-Dimethylphenol	130	381	ND		UG/KG	1
bis(2-Chloroethoxy)methane	28.7	381	ND		UG/KG	1
2,4-Dichlorophenol	140	381	ND		UG/KG	1
1,2,4-Trichlorobenzene	58.7	381	ND		UG/KG	1
Naphthalene	15.8	381	ND		UG/KG	1
4-Chloroaniline	87.5	381	ND		UG/KG	1
Hexachlorobutadiene	67	381	ND		UG/KG	1
4-Chloro-3-methylphenol	114	381	ND		UG/KG	1
2-Methylnaphthalene	71.6	381	ND		UG/KG	1
Hexachlorocyclopentadiene	58	381	ND		UG/KG	1
2,4,6-Trichlorophenol	122	381	ND		UG/KG	1
2,4,5-Trichlorophenol	129	381	ND		UG/KG	1
2-Chloronaphthalene	56.3	381	ND		UG/KG	1
2-Nitroaniline	59.2	381	ND		UG/KG	1
Dimethylphthalate	23.9	381	ND		UG/KG	1
2,6-Dinitrotoluene	48.8	381	ND		UG/KG	1

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Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-002-02-ESW	ARDL Lab No.:	301102-06 (cont'd)
Desc/Location:	NONE	Lab Filename:	Z4018
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1715	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	13.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	44.1	381	ND		UG/KG	1
2,4-Dinitrophenol	118	381	ND		UG/KG	1
4-Nitrophenol	104	381	ND		UG/KG	1
Dibenzofuran	77.2	381	ND		UG/KG	1
2,4-Dinitrotoluene	56.6	381	ND		UG/KG	1
Diethylphthalate	16.6	381	ND		UG/KG	1
4-Chlorophenyl-phenylether	24.8	381	ND		UG/KG	1
4-Nitroaniline	46.1	381	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	103	381	ND		UG/KG	1
N-Nitrosodiphenylamine	23.9	381	ND		UG/KG	1
4-Bromophenyl-phenylether	28.3	381	ND		UG/KG	1
Hexachlorobenzene	47.9	381	ND		UG/KG	1
Pentachlorophenol	95.5	381	ND		UG/KG	1
Di-n-butylphthalate	30.4	381	ND		UG/KG	1
Butylbenzylphthalate	23.4	381	92.8	J	UG/KG	1
3,3'-Dichlorobenzidine	157	381	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	25.4	381	ND		UG/KG	1
Di-n-octylphthalate	50.7	381	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	53%
Phenol-d5	24-113	72%
Nitrobenzene-d5	23-120	58%
2-Fluorobiphenyl	30-115	77%
2,4,6-Tribromophenol	19-122	84%
Terphenyl-d14	18-137	94%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Lab Report No: 301102 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-007-04-EBT	ARDL Lab No.:	301102-07
Desc/Location:	NONE	Lab Filename:	Z4019
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1722	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	18.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	140	405	ND		UG/KG	1
bis(2-Chloroethyl)ether	29.6	405	ND		UG/KG	1
2-Chlorophenol	129	405	ND		UG/KG	1
1,3-Dichlorobenzene	65.5	405	ND		UG/KG	1
1,4-Dichlorobenzene	52.3	405	ND		UG/KG	1
1,2-Dichlorobenzene	59.5	405	ND		UG/KG	1
2-Methylphenol	115	405	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	23.4	405	ND		UG/KG	1
4-Methylphenol	146	405	ND		UG/KG	1
N-Nitroso-di-n-propylamine	27.7	405	ND		UG/KG	1
Hexachloroethane	60.5	405	ND		UG/KG	1
Nitrobenzene	76	405	ND		UG/KG	1
Isophorone	60.9	405	ND		UG/KG	1
2-Nitrophenol	125	405	ND		UG/KG	1
2,4-Dimethylphenol	139	405	ND		UG/KG	1
bis(2-Chloroethoxy)methane	30.6	405	ND		UG/KG	1
2,4-Dichlorophenol	148	405	ND		UG/KG	1
1,2,4-Trichlorobenzene	62.5	405	ND		UG/KG	1
Naphthalene	16.8	405	ND		UG/KG	1
4-Chloroaniline	93.1	405	ND		UG/KG	1
Hexachlorobutadiene	71.3	405	ND		UG/KG	1
4-Chloro-3-methylphenol	121	405	ND		UG/KG	1
2-Methylnaphthalene	76.2	405	ND		UG/KG	1
Hexachlorocyclopentadiene	61.7	405	ND		UG/KG	1
2,4,6-Trichlorophenol	130	405	ND		UG/KG	1
2,4,5-Trichlorophenol	137	405	ND		UG/KG	1
2-Chloronaphthalene	59.9	405	ND		UG/KG	1
2-Nitroaniline	62.9	405	ND		UG/KG	1
Dimethylphthalate	25.4	405	ND		UG/KG	1
2,6-Dinitrotoluene	51.9	405	ND		UG/KG	1

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Lab Report No: 301102 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-007-04-EBT	ARDL Lab No.:	301102-07 (cont'd)
Desc/Location:	NONE	Lab Filename:	Z4019
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1722	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	18.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	46.9	405	ND		UG/KG	1
2,4-Dinitrophenol	125	405	ND		UG/KG	1
4-Nitrophenol	110	405	ND		UG/KG	1
Dibenzofuran	82.1	405	ND		UG/KG	1
2,4-Dinitrotoluene	60.2	405	ND		UG/KG	1
Diethylphthalate	17.7	405	ND		UG/KG	1
4-Chlorophenyl-phenylether	26.4	405	ND		UG/KG	1
4-Nitroaniline	49.1	405	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	109	405	ND		UG/KG	1
N-Nitrosodiphenylamine	25.4	405	ND		UG/KG	1
4-Bromophenyl-phenylether	30.1	405	ND		UG/KG	1
Hexachlorobenzene	50.9	405	ND		UG/KG	1
Pentachlorophenol	102	405	ND		UG/KG	1
Di-n-butylphthalate	32.4	405	ND		UG/KG	1
Butylbenzylphthalate	24.9	405	ND		UG/KG	1
3,3'-Dichlorobenzidine	167	405	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	27	405	ND		UG/KG	1
Di-n-octylphthalate	54	405	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	50%
Phenol-d5	24-113	58%
Nitrobenzene-d5	23-120	45%
2-Fluorobiphenyl	30-115	60%
2,4,6-Tribromophenol	19-122	78%
Terphenyl-d14	18-137	82%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Lab Report No: 301102 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-001-03-EBT	ARDL Lab No.:	301102-08
Desc/Location:	NONE	Lab Filename:	Z4020
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1730	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	20.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	143	414	ND		UG/KG	1
bis(2-Chloroethyl)ether	30.2	414	ND		UG/KG	1
2-Chlorophenol	132	414	ND		UG/KG	1
1,3-Dichlorobenzene	67	414	ND		UG/KG	1
1,4-Dichlorobenzene	53.5	414	ND		UG/KG	1
1,2-Dichlorobenzene	60.9	414	ND		UG/KG	1
2-Methylphenol	118	414	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	24	414	ND		UG/KG	1
4-Methylphenol	149	414	ND		UG/KG	1
N-Nitroso-di-n-propylamine	28.4	414	ND		UG/KG	1
Hexachloroethane	61.9	414	ND		UG/KG	1
Nitrobenzene	77.7	414	ND		UG/KG	1
Isophorone	62.2	414	ND		UG/KG	1
2-Nitrophenol	128	414	ND		UG/KG	1
2,4-Dimethylphenol	142	414	ND		UG/KG	1
bis(2-Chloroethoxy)methane	31.2	414	ND		UG/KG	1
2,4-Dichlorophenol	152	414	ND		UG/KG	1
1,2,4-Trichlorobenzene	63.9	414	ND		UG/KG	1
Naphthalene	17.2	414	ND		UG/KG	1
4-Chloroaniline	95.2	414	ND		UG/KG	1
Hexachlorobutadiene	72.9	414	ND		UG/KG	1
4-Chloro-3-methylphenol	124	414	ND		UG/KG	1
2-Methylnaphthalene	77.9	414	ND		UG/KG	1
Hexachlorocyclopentadiene	63.1	414	ND		UG/KG	1
2,4,6-Trichlorophenol	133	414	ND		UG/KG	1
2,4,5-Trichlorophenol	141	414	ND		UG/KG	1
2-Chloronaphthalene	61.2	414	ND		UG/KG	1
2-Nitroaniline	64.4	414	ND		UG/KG	1
Dimethylphthalate	26	414	ND		UG/KG	1
2,6-Dinitrotoluene	53.1	414	ND		UG/KG	1

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Lab Report No: 301102 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-001-03-EBT	ARDL Lab No.:	301102-08 (cont'd)
Desc/Location:	NONE	Lab Filename:	Z4020
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1730	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	20.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	47.9	414	ND		UG/KG	1
2,4-Dinitrophenol	128	414	ND		UG/KG	1
4-Nitrophenol	113	414	ND		UG/KG	1
Dibenzofuran	83.9	414	ND		UG/KG	1
2,4-Dinitrotoluene	61.6	414	ND		UG/KG	1
Diethylphthalate	18.1	414	ND		UG/KG	1
4-Chlorophenyl-phenylether	27	414	ND		UG/KG	1
4-Nitroaniline	50.2	414	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	112	414	ND		UG/KG	1
N-Nitrosodiphenylamine	26	414	ND		UG/KG	1
4-Bromophenyl-phenylether	30.7	414	ND		UG/KG	1
Hexachlorobenzene	52.1	414	ND		UG/KG	1
Pentachlorophenol	104	414	ND		UG/KG	1
Di-n-butylphthalate	33.1	414	ND		UG/KG	1
Butylbenzylphthalate	25.5	414	410	J	UG/KG	1
3,3'-Dichlorobenzidine	171	414	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	27.6	414	ND		UG/KG	1
Di-n-octylphthalate	55.2	414	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	60%
Phenol-d5	24-113	75%
Nitrobenzene-d5	23-120	53%
2-Fluorobiphenyl	30-115	64%
2,4,6-Tribromophenol	19-122	83%
Terphenyl-d14	18-137	82%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

PCB's-8082

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	VWR-004-02-ESW	ARDL Lab No.:	301102-01
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1330	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/20/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4998
% Moisture:	17.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9	40.0	ND		UG/KG	1
Aroclor 1221	16.4	81.2	ND		UG/KG	1
Aroclor 1232	10.1	40.0	ND		UG/KG	1
Aroclor 1242	11.3	40.0	ND		UG/KG	1
Aroclor 1248	7.5	40.0	ND		UG/KG	1
Aroclor 1254	5.2	40.0	ND		UG/KG	1
Aroclor 1260	6.7	40.0	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	82%
Tetrachloro-m-xylene	42-94	74%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
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Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	FSS-005-08-EBT	ARDL Lab No.:	301102-03
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1605	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/20/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4998
% Moisture:	19	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.2	40.7	ND		UG/KG	1
Aroclor 1221	16.7	82.7	ND		UG/KG	1
Aroclor 1232	10.3	40.7	ND		UG/KG	1
Aroclor 1242	11.5	40.7	ND		UG/KG	1
Aroclor 1248	7.7	40.7	ND		UG/KG	1
Aroclor 1254	5.3	40.7	ND		UG/KG	1
Aroclor 1260	6.8	40.7	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	75%
Tetrachloro-m-xylene	42-94	76%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/25/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	FSS-006-05-EBT	ARDL Lab No.:	301102-04
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1611	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/21/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4998
% Moisture:	18	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.1	40.2	ND		UG/KG	1
Aroclor 1221	16.5	81.7	ND		UG/KG	1
Aroclor 1232	10.2	40.2	ND		UG/KG	1
Aroclor 1242	11.3	40.2	ND		UG/KG	1
Aroclor 1248	7.6	40.2	ND		UG/KG	1
Aroclor 1254	5.3	40.2	ND		UG/KG	1
Aroclor 1260	6.7	40.2	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	79%
Tetrachloro-m-xylene	42-94	78%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/24/2002

Project Name:	USACE FT DEARBORN	Analysis:	PCB'S
Project No.:	17297	Analytical Method:	8082
		Prep Method:	3550A

Field ID:	FSS-007-05-EBT	ARDL Lab No.:	301102-05
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1611	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/20/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4998
% Moisture:	16.9	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9	39.7	ND		UG/KG	1
Aroclor 1221	16.2	80.6	ND		UG/KG	1
Aroclor 1232	10	39.7	ND		UG/KG	1
Aroclor 1242	11.2	39.7	ND		UG/KG	1
Aroclor 1248	7.5	39.7	ND		UG/KG	1
Aroclor 1254	5.2	39.7	ND		UG/KG	1
Aroclor 1260	6.6	39.7	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	77%
Tetrachloro-m-xylene	42-94	76%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Lab Report No: 301102 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	VWR-002-02-ESW	ARDL Lab No.:	301102-06
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1715	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/20/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4998
% Moisture:	13.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	8.6	38.1	ND		UG/KG	1
Aroclor 1221	15.6	77.3	ND		UG/KG	1
Aroclor 1232	9.6	38.1	ND		UG/KG	1
Aroclor 1242	10.7	38.1	ND		UG/KG	1
Aroclor 1248	7.2	38.1	ND		UG/KG	1
Aroclor 1254	5	38.1	ND		UG/KG	1
Aroclor 1260	6.4	38.1	42.0		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	82%
Tetrachloro-m-xylene	42-94	83%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	VWR-007-04-EBT	ARDL Lab No.:	301102-07
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1722	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/19/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4998
% Moisture:	18.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.1	40.5	ND		UG/KG	1
Aroclor 1221	16.6	82.2	ND		UG/KG	1
Aroclor 1232	10.2	40.5	ND		UG/KG	1
Aroclor 1242	11.4	40.5	ND		UG/KG	1
Aroclor 1248	7.6	40.5	ND		UG/KG	1
Aroclor 1254	5.3	40.5	ND		UG/KG	1
Aroclor 1260	6.8	40.5	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	78%
Tetrachloro-m-xylene	42-94	73%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	VWR-001-03-EBT	ARDL Lab No.:	301102-08
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1730	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/20/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4998
% Moisture:	20.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.3	41.4	ND		UG/KG	1
Aroclor 1221	16.9	84.1	ND		UG/KG	1
Aroclor 1232	10.5	41.4	ND		UG/KG	1
Aroclor 1242	11.7	41.4	ND		UG/KG	1
Aroclor 1248	7.8	41.4	ND		UG/KG	1
Aroclor 1254	5.4	41.4	ND		UG/KG	1
Aroclor 1260	6.9	41.4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	80%
Tetrachloro-m-xylene	42-94	77%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

PAH-8270 SIM

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/11/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-004-02-ESW	ARDL Lab No.:	301102-01
Desc/Location:	NONE	Lab Filename:	Z3868
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1330	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/26/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5000
% Moisture:	17.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.4	12.1	10.8	J	UG/KG	1
Acenaphthylene	2.9	12.1	ND		UG/KG	1
Acenaphthene	3.3	12.1	ND		UG/KG	1
Fluorene	2.8	12.1	ND		UG/KG	1
Phenanthrene	3.1	12.1	37.8		UG/KG	1
Anthracene	2.4	12.1	5.8	J	UG/KG	1
Fluoranthene	3.1	12.1	29.5		UG/KG	1
Pyrene	2.3	12.1	25.0		UG/KG	1
Benzo(a)anthracene	2.4	12.1	10.1	J	UG/KG	1
Chrysene	2.9	12.1	14.0		UG/KG	1
Benzo(b)fluoranthene	2.9	12.1	ND		UG/KG	1
Benzo(k)fluoranthene	4.5	12.1	ND		UG/KG	1
Benzo(a)pyrene	2.7	12.1	10.3	J	UG/KG	1
Indeno(1,2,3-cd)pyrene	2.8	12.1	6.1	J	UG/KG	1
Dibenzo(a,h)anthracene	2.7	12.1	ND		UG/KG	1
Benzo(g,h,i)perylene	2.9	12.1	7.3	J	UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	60%
Nitrobenzene-d5	23-120	57%
Terphenyl-d14	18-137	88%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/26/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-005-08-EBT	ARDL Lab No.:	301102-03
Desc/Location:	NONE	Lab Filename:	Z3780
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1605	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/24/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5000
% Moisture:	19	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.4	12.3	ND		UG/KG	1
Acenaphthylene	2.9	12.3	ND		UG/KG	1
Acenaphthene	3.4	12.3	ND		UG/KG	1
Fluorene	2.9	12.3	ND		UG/KG	1
Phenanthrene	3.1	12.3	ND		UG/KG	1
Anthracene	2.5	12.3	ND		UG/KG	1
Fluoranthene	3.2	12.3	ND		UG/KG	1
Pyrene	2.3	12.3	2.7	J	UG/KG	1
Benzo(a)anthracene	2.4	12.3	ND		UG/KG	1
Chrysene	2.9	12.3	3.8	J	UG/KG	1
Benzo(b)fluoranthene	2.9	12.3	ND		UG/KG	1
Benzo(k)fluoranthene	4.6	12.3	ND		UG/KG	1
Benzo(a)pyrene	2.8	12.3	ND		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.9	12.3	ND		UG/KG	1
Dibenzo(a,h)anthracene	2.7	12.3	ND		UG/KG	1
Benzo(g,h,i)perylene	3	12.3	3.1	J	UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	63%
Nitrobenzene-d5	23-120	63%
Terphenyl-d14	18-137	70%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-006-05-EBT	ARDL Lab No.:	301102-04
Desc/Location:	NONE	Lab Filename:	Z3869
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1611	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/26/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5000
% Moisture:	18	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.4	12.2	ND		UG/KG	1
Acenaphthylene	2.9	12.2	6.4	J	UG/KG	1
Acenaphthene	3.3	12.2	11.4	J	UG/KG	1
Fluorene	2.9	12.2	19.9		UG/KG	1
Phenanthrene	3.1	12.2	91.6		UG/KG	1
Anthracene	2.4	12.2	18.2		UG/KG	1
Fluoranthene	3.2	12.2	80.5		UG/KG	1
Pyrene	2.3	12.2	76.4		UG/KG	1
Benzo(a)anthracene	2.4	12.2	32.6		UG/KG	1
Chrysene	2.9	12.2	40.6		UG/KG	1
Benzo(b)fluoranthene	2.9	12.2	28.3		UG/KG	1
Benzo(k)fluoranthene	4.5	12.2	24.9		UG/KG	1
Benzo(a)pyrene	2.7	12.2	28.8		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.9	12.2	18.4		UG/KG	1
Dibenzo(a,h)anthracene	2.7	12.2	6.7	J	UG/KG	1
Benzo(g,h,i)perylene	2.9	12.2	22.3		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	69%
Nitrobenzene-d5	23-120	70%
Terphenyl-d14	18-137	80%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-007-05-EBT	ARDL Lab No.:	301102-05
Desc/Location:	NONE	Lab Filename:	Z3870
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1611	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/26/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5000
% Moisture:	16.9	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.4	12.0	ND		UG/KG	1
Acenaphthylene	2.9	12.0	ND		UG/KG	1
Acenaphthene	3.3	12.0	ND		UG/KG	1
Fluorene	2.8	12.0	5.4	J	UG/KG	1
Phenanthrene	3	12.0	23.1		UG/KG	1
Anthracene	2.4	12.0	5.8	J	UG/KG	1
Fluoranthene	3.1	12.0	55.1		UG/KG	1
Pyrene	2.2	12.0	62.4		UG/KG	1
Benzo(a)anthracene	2.4	12.0	32.8		UG/KG	1
Chrysene	2.8	12.0	44.2		UG/KG	1
Benzo(b)fluoranthene	2.9	12.0	47.7		UG/KG	1
Benzo(k)fluoranthene	4.4	12.0	36.8		UG/KG	1
Benzo(a)pyrene	2.7	12.0	48.2		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.8	12.0	33.5		UG/KG	1
Dibenzo(a,h)anthracene	2.6	12.0	ND		UG/KG	1
Benzo(g,h,i)perylene	2.9	12.0	39.5		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	88%
Nitrobenzene-d5	23-120	81%
Terphenyl-d14	18-137	97%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/11/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-002-02-ESW	ARDL Lab No.:	301102-06
Desc/Location:	NONE	Lab Filename:	Z3871
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1715	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/26/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5000
% Moisture:	13.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.3	11.5	ND		UG/KG	1
Acenaphthylene	2.7	11.5	6.7	J	UG/KG	1
Acenaphthene	3.2	11.5	7.5	J	UG/KG	1
Fluorene	2.7	11.5	7.8	J	UG/KG	1
Phenanthrene	2.9	11.5	146		UG/KG	1
Anthracene	2.3	11.5	27.7		UG/KG	1
Fluoranthene	3	11.5	335		UG/KG	1
Pyrene	2.1	11.5	291		UG/KG	1
Benzo(a)anthracene	2.3	11.5	138		UG/KG	1
Chrysene	2.7	11.5	190		UG/KG	1
Benzo(b)fluoranthene	2.7	11.5	ND		UG/KG	1
Benzo(k)fluoranthene	4.3	11.5	ND		UG/KG	1
Benzo(a)pyrene	2.6	11.5	167		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.7	11.5	104		UG/KG	1
Dibenzo(a,h)anthracene	2.5	11.5	ND		UG/KG	1
Benzo(g,h,i)perylene	2.8	11.5	114		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	87%
Nitrobenzene-d5	23-120	81%
Terphenyl-d14	18-137	84%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-007-04-EBT	ARDL Lab No.:	301102-07
Desc/Location:	NONE	Lab Filename:	Z3872
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1722	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/26/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5000
% Moisture:	18.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.4	12.3	ND		UG/KG	1
Acenaphthylene	2.9	12.3	ND		UG/KG	1
Acenaphthene	3.4	12.3	ND		UG/KG	1
Fluorene	2.9	12.3	ND		UG/KG	1
Phenanthrene	3.1	12.3	ND		UG/KG	1
Anthracene	2.5	12.3	ND		UG/KG	1
Fluoranthene	3.2	12.3	ND		UG/KG	1
Pyrene	2.3	12.3	ND		UG/KG	1
Benzo(a)anthracene	2.4	12.3	ND		UG/KG	1
Chrysene	2.9	12.3	ND		UG/KG	1
Benzo(b)fluoranthene	2.9	12.3	ND		UG/KG	1
Benzo(k)fluoranthene	4.5	12.3	ND		UG/KG	1
Benzo(a)pyrene	2.7	12.3	ND		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.9	12.3	ND		UG/KG	1
Dibenzo(a,h)anthracene	2.7	12.3	ND		UG/KG	1
Benzo(g,h,i)perylene	2.9	12.3	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	58%
Nitrobenzene-d5	23-120	52%
Terphenyl-d14	18-137	67%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/11/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-001-03-EBT	ARDL Lab No.:	301102-08
Desc/Location:	NONE	Lab Filename:	Z3873
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1730	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/26/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5000
% Moisture:	20.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.5	12.5	ND		UG/KG	1
Acenaphthylene	3	12.5	ND		UG/KG	1
Acenaphthene	3.4	12.5	ND		UG/KG	1
Fluorene	2.9	12.5	ND		UG/KG	1
Phenanthrene	3.2	12.5	5.7	J	UG/KG	1
Anthracene	2.5	12.5	ND		UG/KG	1
Fluoranthene	3.2	12.5	11.0	J	UG/KG	1
Pyrene	2.3	12.5	11.0	J	UG/KG	1
Benzo(a)anthracene	2.5	12.5	5.1	J	UG/KG	1
Chrysene	3	12.5	6.7	J	UG/KG	1
Benzo(b)fluoranthene	3	12.5	ND		UG/KG	1
Benzo(k)fluoranthene	4.6	12.5	ND		UG/KG	1
Benzo(a)pyrene	2.8	12.5	5.4	J	UG/KG	1
Indeno(1,2,3-cd)pyrene	2.9	12.5	3.6	J	UG/KG	1
Dibenzo(a,h)anthracene	2.8	12.5	ND		UG/KG	1
Benzo(g,h,i)perylene	3	12.5	4.6	J	UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	49%
Nitrobenzene-d5	23-120	47%
Terphenyl-d14	18-137	76%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

8015M

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/25/2002

Project Name:	USACE FT DEARBORN	Analysis:	MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.:	17297	Analytical Method:	8015
		Prep Method:	NONE

Field ID:	VWR-004-02-ESW	ARDL Lab No.:	301102-01
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1330	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/23/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B4999
% Moisture:	17.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	1.9	12.1	ND		MG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/25/2002

Project Name:	USACE FT DEARBORN	Analysis:	MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.:	17297	Analytical Method:	8015
		Prep Method:	NONE

Field ID:	VWR-002-02-ESW	ARDL Lab No.:	301102-06
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1715	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/23/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B4999
% Moisture:	13.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	1.8	11.5	ND		MG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/25/2002

Project Name:	USACE FT DEARBORN	Analysis:	MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.:	17297	Analytical Method:	8015
		Prep Method:	NONE

Field ID:	VWR-007-04-EBT	ARDL Lab No.:	301102-07
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1722	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/24/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B4999
% Moisture:	18.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	2	12.3	ND		MG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/25/2002

Project Name:	USACE FT DEARBORN	Analysis:	MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.:	17297	Analytical Method:	8015
		Prep Method:	NONE

Field ID:	VWR-001-03-EBT	ARDL Lab No.:	301102-08
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1730	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/24/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B4999
% Moisture:	20.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	2	12.5	ND		MG/KG	1

INORGANICS

INORGANIC ANALYSIS DATA PACKAGE

FERGUSON HARBOR

Report Date: 09/27/02

Delivery Order No.: 17297

ARDL Report No.: 301102

Lab Name: ARDL, Inc.
Samples Received at ARDL: 13-Sep-02
Project Name: USACE Ft. Dearborn

CASE NARRATIVE

Sample ID No.	Date Collected	Lab ID No.	Analysis Requested
VWR-004-02-ESW	09/12/02	301102-01	Total Metals(1), Total Solids
VWR-002-02-ERB	09/12/02	301102-02	Total Metals(1)
FSS-005-08-EBT	09/12/02	301102-03	Total Metals(1), Total Solids
FSS-006-05-EBT	09/12/02	301102-04	Total Metals(1), Total Solids
FSS-007-05-EBT	09/12/02	301102-05	Total Metals(1), Total Solids
VWR-002-02-ESW	09/12/02	301102-06	Total Metals(1), Total Solids
VWR-007-04-EBT	09/12/02	301102-07	Total Metals(1), Total Solids
VWR-001-03-EBT	09/12/02	301102-08	Total Metals(1), Total Solids

(1) Including aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, nickel, potassium, selenium, silver, sodium, thallium, vanadium and zinc.

The quality control data are summarized as follows:

LABORATORY CONTROL SAMPLES
Percent recovery of all LCS analyses were within control limits.

PREPARATION BLANKS
Results of all preparation blanks were within acceptable limits.

MATRIX SPIKES
Percent recovery of all matrix spikes and matrix spike duplicates except 1 of 2 for lead and 2 of 2 for antimony in the soil matrix were within control limits. The sample results for aluminum, iron and manganese in the soil matrix were greater than 4 times the spike amount; therefore, percent recovery was not considered.

DUPLICATES
RPD on all duplicate analyses were within control limits.
All duplicate analyses are reported as MS/MSD except calcium, magnesium, potassium, sodium and total solids which are reported as sample/duplicate.

Release of the data contained in this package has been authorized by the Technical Services Manager or his designee as verified by the following signature.

Daniel J. Gillespie
Technical Services Manager

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: VWR-004-02-ESW ARDL No: 301102-01
Sampling Loc'n: NONE Received: 09/13/2002
Sampling Date: 09/12/2002 Matrix: SOIL
Sampling Time: 1330 Moisture: 17.5

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.1	12300	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Antimony	0.61	0.82	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Arsenic	0.36	7.6	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Barium	1.2	134	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Beryllium	0.12	0.55	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cadmium	0.24	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Calcium	12.1	5070	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Chromium	0.61	17.6	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cobalt	0.61	9.8	MG/KG	3050B	6010B	09/18/02	09/23/02	P399[illegible]
Copper	1.2	24.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P39[illegible]
Iron	6.1	20600	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Lead	0.36	19.0	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Magnesium	12.1	3730	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Manganese	0.61	403	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Mercury	0.097	0.11	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.8	19.6	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Potassium	242	1330	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Selenium	0.61	0.93	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Silver	0.61	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Sodium	48.5	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Thallium	0.36	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Vanadium	0.61	26.3	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Zinc	0.61	48.8	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Solids, Percent	1	82.5	%	NONE	160.3	NA	09/13/02	09179442

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: FSS-005-08-EBT ARDL No: 301102-03
Sampling Loc'n: NONE Received: 09/13/2002
Sampling Date: 09/12/2002 Matrix: SOIL
Sampling Time: 1605 Moisture: 19

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.3	6440	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Antimony	0.62	0.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Arsenic	0.37	9.7	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Barium	1.2	37.8	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Beryllium	0.12	0.25	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cadmium	0.25	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Calcium	12.3	53100	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Chromium	0.62	11.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cobalt	0.62	8.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Copper	1.2	41.1	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Iron	6.2	20100	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Lead	0.37	17.2	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Magnesium	12.3	34000	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Manganese	0.62	437	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Mercury	0.099	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.9	25.5	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Potassium	247	1470	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Selenium	0.62	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Silver	0.62	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Sodium	49.4	65.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Thallium	0.37	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Vanadium	0.62	13.4	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Zinc	0.62	46.4	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Solids, Percent	1	81.0	%	NONE	160.3	NA	09/13/02	09179442

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: FSS-006-05-EBT ARDL No: 301102-04
Sampling Loc'n: NONE Received: 09/13/2002
Sampling Date: 09/12/2002 Matrix: SOIL
Sampling Time: 1611 Moisture: 18

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.2	10200	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Antimony	0.61	0.92	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Arsenic	0.37	8.1	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Barium	1.2	82.6	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Beryllium	0.12	0.41	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cadmium	0.24	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Calcium	12.2	21900	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Chromium	0.61	18.3	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cobalt	0.61	8.8	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Copper	1.2	39.1	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Iron	6.1	20300	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Lead	0.37	43.2	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Magnesium	12.2	13500	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Manganese	0.61	404	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Mercury	0.098	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.8	22.1	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Potassium	244	1400	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Selenium	0.61	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Silver	0.61	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Sodium	48.8	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Thallium	0.37	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Vanadium	0.61	21.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Zinc	0.61	60.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Solids, Percent	1	82.0	%	NONE	160.3	NA	09/13/02	09179442

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: FSS-007-05-EBT ARDL No: 301102-05
Sampling Loc'n: NONE Received: 09/13/2002
Sampling Date: 09/12/2002 Matrix: SOIL
Sampling Time: 1611 Moisture: 16.9

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12	9620	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Antimony	0.6	0.91	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Arsenic	0.36	8.5	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Barium	1.2	79.2	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Beryllium	0.12	0.36	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cadmium	0.24	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Calcium	12	23800	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Chromium	0.6	15.5	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cobalt	0.6	9.7	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Copper	1.2	230	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Iron	6	19700	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Lead	0.36	33.7	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Magnesium	12	14100	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Manganese	0.6	400	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Mercury	0.096	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.8	21.8	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Potassium	241	1370	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Selenium	0.6	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Silver	0.6	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Sodium	48.1	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Thallium	0.36	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Vanadium	0.6	20.4	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Zinc	0.6	64.6	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Solids, Percent	1	83.1	%	NONE	160.3	NA	09/13/02	09179442

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: VWR-002-02-ESW ARDL No: 301102-06
Sampling Loc'n: NONE Received: 09/13/2002
Sampling Date: 09/12/2002 Matrix: SOIL
Sampling Time: 1715 Moisture: 13.3

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	11.5	11900	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Antimony	0.58	2.4	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Arsenic	0.35	9.8	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Barium	1.2	154	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Beryllium	0.12	0.5	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cadmium	0.23	1.4	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Calcium	11.5	11200	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Chromium	0.58	21.7	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cobalt	0.58	9.2	MG/KG	3050B	6010B	09/18/02	09/23/02	P399P
Copper	1.2	41.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P399
Iron	5.8	21400	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Lead	0.35	158	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Magnesium	11.5	7180	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Manganese	0.58	653	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Mercury	0.092	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.7	19.6	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Potassium	231	1690	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Selenium	0.58	0.8	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Silver	0.58	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Sodium	46.1	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Thallium	0.35	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Vanadium	0.58	26.8	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Zinc	0.58	105	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Solids, Percent	1	86.7	%	NONE	160.3	NA	09/13/02	09179442

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: VWR-007-04-EBT ARDL No: 301102-07
Sampling Loc'n: NONE Received: 09/13/2002
Sampling Date: 09/12/2002 Matrix: SOIL
Sampling Time: 1722 Moisture: 18.5

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.3	14900	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Antimony	0.61	0.94	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Arsenic	0.37	11.8	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Barium	1.2	115	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Beryllium	0.12	0.52	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Cadmium	0.25	ND	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Calcium	12.3	3390	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Chromium	0.61	21.2	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Cobalt	0.61	10.6	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Copper	1.2	37.0	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Iron	6.1	31600	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Lead	0.37	18.1	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Magnesium	12.3	4240	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Manganese	0.61	622	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Mercury	0.098	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.8	30.3	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Potassium	245	1080	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Selenium	0.61	0.94	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Silver	0.61	ND	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Sodium	49.1	ND	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Thallium	0.37	ND	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Vanadium	0.61	33.3	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Zinc	0.61	58.4	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Solids, Percent	1	81.5	%	NONE	160.3	NA	09/13/02	09179442

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: VWR-001-03-EBT ARDL No: 301102-08
Sampling Loc'n: NONE Received: 09/13/2002
Sampling Date: 09/12/2002 Matrix: SOIL
Sampling Time: 1730 Moisture: 20.3

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.5	15300	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Antimony	0.63	0.83	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Arsenic	0.38	9.3	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Barium	1.3	117	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Beryllium	0.13	0.39	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Cadmium	0.25	ND	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Calcium	12.5	4000	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Chromium	0.63	21.8	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Cobalt	0.63	10.7	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Copper	1.3	29.0	MG/KG	3050B	6010B	09/18/02	09/24/02	P399
Iron	6.3	28400	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Lead	0.38	18.7	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Magnesium	12.5	4410	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Manganese	0.63	663	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Mercury	0.1	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.9	26.0	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Potassium	251	982	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Selenium	0.63	0.96	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Silver	0.63	ND	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Sodium	50.2	ND	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Thallium	0.38	ND	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Vanadium	0.63	35.1	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Zinc	0.63	46.4	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Solids, Percent	1	79.7	%	NONE	160.3	NA	09/13/02	09179442

ORGANIC ANALYSIS DATA PACKAGE

Contract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301103 Samples Received at ARDL: 9/14/02

CASE NARRATIVE

VOLATILE FRACTION - METHOD 8260

Soil samples were received by ARDL, Inc. on September 14, 2002, for VOA analysis for GC/MS. All analyses were performed within the method specified holding time.

No unusual problems were encountered during the sample analyses.

SEMIVOLATILE FRACTION - METHOD 8270

Soil and water samples were received by ARDL, Inc. on September 14, 2002, for BNA analysis by GC/MS. All analyses were performed according to low level protocol within method specified holding times.

There was insufficient sample volume to perform a matrix spike and matrix spike duplicate evaluation for this site, for the water sample. Two spiked blanks were extracted and analyzed for QC purposes.

,4-Dichlorobenzene had low recovery in the soil MS/MSD. This compound had acceptable recovery in the spiked blank. No further action was required.

4-Nitrophenol had high recovery in the spiked blank and MS/MSD. This compound was not detected in any sample, thus no further action was required.

Samples FSS-004-04-ESW and FSS-003-04-ESW both required manual integrations for the compound benzo(k)fluoranthene.

No other unusual problems were encountered during the sample extraction or sample analyses.

PNA-SIM FRACTION

Soil and water samples were received by ARDL, Inc. on September 14, 2002, for PNA-SIM analysis by GC/MS. All analyses were performed according to low level protocol within method specified holding times.

There was insufficient sample volume to perform a matrix spike and matrix spike duplicate evaluation for the water sample. Two spiked blanks were extracted and analyzed for QC purposes.

The soil blank failed recovery criteria for one surrogate compound, however, since there were no other surrogate failures in the batch, no reanalysis was performed.

The soil MS/MSD had several compounds which exceeded the % RPD ranges. All had acceptable spike recoveries, indicating acceptable accuracy in the QC.

ORGANIC ANALYSIS DATA PACKAGE

Contract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301103 Samples Received at ARDL: 9/14/02

CASE NARRATIVE (Continued)

PNA-SIM FRACTION (Continued)

No other unusual problems were encountered during the sample extraction or sample analyses.

GLYCOL FRACTION - METHOD 8015M

A soil sample was received by ARDL, Inc. on September 14, 2002, for Glycol analysis. The samples were extracted within the method specified holding time.

This sample was extracted in a batch with ARDL SDG 301101. Therefore, only one blank and spike blank was extracted. Due to software limitations, the blank and spike blank are designated as ARDL SDG 301101, although they are also applicable to ARDL SDG 301103. Additionally, the MS/MSD evaluation was also performed on samples from ARDL SDG 301101. Refer to that data package for those results.

No additional problems were encountered during the analysis of these samples.

PCB FRACTION - METHOD 8082

Soil and water samples were received by ARDL, Inc. on September 14, 2002, for PCB analysis. The samples were extracted within holding time requirements.

The soil samples were cleaned up by acid hydrolysis.

The water sample was extracted with ARDL SDG 301100. Therefore, only one blank and spike blank were extracted. Due to software limitations, the blank and spike blank are designated as ARDL SDG 301100, although they are also applicable to ARDL SDG 301103. Additionally, due to insufficient sample volumes supplied, an MS/MSD evaluation could not be performed on the water samples. As QC, two spike blanks were extracted and analyzed.

The columns used for PCB analysis are as follows: Primary column - RTX-CLP PESTICIDE II, 30 meter, 0.32 mm ID, 0.25 mm df; Confirmation column - RTX-CLP PESTICIDES, 30 meter, 0.32 mm ID, 0.50 mm df.

The following pages list manual integrations performed on the data. (See hard copy for explanation of manual integrations):

ORGANIC ANALYSIS DATA PACKAGE

Contract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301103 Samples Received at ARDL: 9/14/02

CASE NARRATIVE (Continued)

PCB FRACTION - METHOD 8082 (Continued)

Pages: 50026-50029
50033-50036
50042-50045
50050-50053
50059-50062
50066-50069
50092, 50157
50145-50148
50166-50169
50266-50269
50274-50277
50282-50285

No additional problems were encountered in the analysis of these samples.

ORGANIC DATA REPORTING QUALIFIERS

The following organic data reporting qualifiers are used as required.

ND- Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the N code is not used.

P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns.

- This flag applies to pesticide results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, do not apply this flag; instead use a laboratory-defined flag.

ORGANIC ANALYSIS DATA PACKAGE

Contract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301103 Samples Received at ARDL: 9/14/02

CASE NARRATIVE (Continued)

ORGANIC DATA REPORTING QUALIFIERS (Continued)

B - This flag is used when the analyte is found in the blank as well as the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must by used for a TIC as well as for a positively identified target compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. If one or more compounds have a response greater than full scale, except as noted in Exhibit D, the sample or extract must be diluted and re-analyzed according to the specifications in Exhibit D. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form 1 for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate copies of Form 1. The Form 1 for the diluted sample shall have the "DL" suffix appended to the sample number.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form 1 for the diluted sample, and all concentration values reported on that Form 1 are flagged with the "D" flag.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized for the Laboratory Manager or his designee, as verified by the following signature.

Daniel J. Gillespie
Technical Services Manager

VOA-8260B

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FSS-004-04-ESW	ARDL Lab No.:	301103-02
Desc/Location:	NONE	Lab Filename:	Y2590
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0730	Prep. Date:	09/14/2002
Matrix:	SOIL	Analysis Date:	09/14/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSP
% Moisture:	18.4	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	12.3	ND		UG/KG	1
Vinyl Chloride	2.2	12.3	ND		UG/KG	1
Bromomethane	1.6	12.3	ND		UG/KG	1
Chloroethane	2	12.3	ND		UG/KG	1
1,1-Dichloroethene	1	6.1	ND		UG/KG	1
Methylene Chloride	2.9	6.1	5.5	JB	UG/KG	1
trans-1,2-Dichloroethene	0.97	6.1	ND		UG/KG	1
1,1-Dichloroethane	0.28	6.1	ND		UG/KG	1
Carbon disulfide	1.1	6.1	ND		UG/KG	1
cis-1,2-Dichloroethene	0.4	6.1	ND		UG/KG	1
Bromochloromethane	0.99	6.1	ND		UG/KG	1
Chloroform	0.83	6.1	ND		UG/KG	1
1,1,1-Trichloroethane	0.38	6.1	ND		UG/KG	1
Carbon Tetrachloride	0.75	6.1	ND		UG/KG	1
Benzene	0.7	6.1	ND		UG/KG	1
1,2-Dichloroethane	0.45	6.1	ND		UG/KG	1
Trichloroethene	1.1	6.1	ND		UG/KG	1
1,2-Dichloropropane	0.42	6.1	ND		UG/KG	1
Bromodichloromethane	0.28	6.1	ND		UG/KG	1
cis-1,3-Dichloropropene	0.8	6.1	ND		UG/KG	1
Toluene	0.38	6.1	ND		UG/KG	1
trans-1,3-Dichloropropene	0.76	6.1	ND		UG/KG	1
1,1,2-Trichloroethane	0.32	6.1	ND		UG/KG	1
Tetrachloroethene	0.58	6.1	ND		UG/KG	1
Dibromochloromethane	0.28	6.1	ND		UG/KG	1
Chlorobenzene	0.26	6.1	ND		UG/KG	1
Ethyl Benzene	0.44	6.1	4.5	J	UG/KG	1
m & p-Xylene	0.98	6.1	25.8		UG/KG	1
o-Xylene	1.1	6.1	ND		UG/KG	1
Styrene	0.43	6.1	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 09/24/2002

Project Name:	USACE FT DEARBORN	Analysis: VOLATILES, GC/MS (8260)	
Project No.	17297	Analytical Method: 8260B	
		Prep Method: 5030A	

Field ID:	FSS-004-04-ESW	ARDL Lab No.:	301103-02 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2590
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0730	Prep. Date:	09/14/2002
Matrix:	SOIL	Analysis Date:	09/14/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSP
% Moisture:	18.4	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.27	6.1	ND		UG/KG	1
2-Hexanone	22.1	24.5	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	6.1	ND		UG/KG	1
Acetone	39.2	61.3	ND		UG/KG	1
2-Butanone	20.8	61.3	ND		UG/KG	1
4-Methyl-2-pentanone	18.4	24.5	ND		UG/KG	1

SURROGATE RECOVERIES:	[illegible]	[illegible]
Dibromofluoromethane	80-125	[illegible]
1,2-Dichloroethane-d4	78-135	102%
Toluene-d8	86-129	104%
4-Bromofluorobenzene	76-141	102%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FSS-003-04-ESW	ARDL Lab No.:	301103-03
Desc/Location:	NONE	Lab Filename:	Y2591
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0735	Prep. Date:	09/14/2002
Matrix:	SOIL	Analysis Date:	09/14/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSP
% Moisture:	17.4	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	12.1	ND		UG/KG	1
Vinyl Chloride	2.2	12.1	ND		UG/KG	1
Bromomethane	1.6	12.1	ND		UG/KG	1
Chloroethane	1.9	12.1	ND		UG/KG	1
1,1-Dichloroethene	1	6.1	ND		UG/KG	1
Methylene Chloride	2.9	6.1	4.7 JB		UG/KG	1
trans-1,2-Dichloroethene	0.96	6.1	ND		UG/KG	1
1,1-Dichloroethane	[illegible]	6.1	ND		UG/KG	1
Carbon disulfide	[illegible]	6.1	ND		UG/KG	1
cis-1,2-Dichloroethene	0.4	6.1	ND		UG/KG	1
Bromochloromethane	0.98	6.1	ND		UG/KG	1
Chloroform	0.82	6.1	ND		UG/KG	1
1,1,1-Trichloroethane	0.38	6.1	ND		UG/KG	1
Carbon Tetrachloride	0.74	6.1	ND		UG/KG	1
Benzene	0.69	6.1	ND		UG/KG	1
1,2-Dichloroethane	0.45	6.1	ND		UG/KG	1
Trichloroethene	1.1	6.1	ND		UG/KG	1
1,2-Dichloropropane	0.41	6.1	ND		UG/KG	1
Bromodichloromethane	0.28	6.1	ND		UG/KG	1
cis-1,3-Dichloropropene	0.79	6.1	ND		UG/KG	1
Toluene	0.38	6.1	ND		UG/KG	1
trans-1,3-Dichloropropene	0.75	6.1	ND		UG/KG	1
1,1,2-Trichloroethane	0.31	6.1	ND		UG/KG	1
Tetrachloroethene	0.57	6.1	ND		UG/KG	1
Dibromochloromethane	0.28	6.1	ND		UG/KG	1
Chlorobenzene	0.25	6.1	ND		UG/KG	1
Ethyl Benzene	0.44	6.1	ND		UG/KG	1
m & p-Xylene	0.97	6.1	ND		UG/KG	1
o-Xylene	1	6.1	ND		UG/KG	1
Styrene	0.42	6.1	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 09/24/2002

Project Name:	USACE FT DEARBORN	Analysis:	VOLATILES, GC/MS (8260)
Project No.	17297	Analytical Method:	8260B
		Prep Method:	5030A

Field ID:	FSS-003-04-ESW	ARDL Lab No.:	301103-03 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2591
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0735	Prep. Date:	09/14/2002
Matrix:	SOIL	Analysis Date:	09/14/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSP
% Moisture:	17.4	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.27	6.1	ND		UG/KG	1
2-Hexanone	21.8	24.2	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	6.1	ND		UG/KG	1
Acetone	38.7	60.5	ND		UG/KG	1
2-Butanone	20.6	60.5	ND		UG/KG	1
4-Methyl-2-pentanone	18.2	24.2	ND		UG/KG	1

SURROGATE % RECOVERY		
Dibromofluoromethane	[illegible]	[illegible]
1,2-Dichloroethane-d4	78-135	98%
Toluene-d8	86-129	100%
4-Bromofluorobenzene	76-141	106%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/09/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FSS-002-04-ESW	ARDL Lab No.:	301103-04
Desc/Location:	NONE	Lab Filename:	Y2592
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0746	Prep. Date:	09/14/2002
Matrix:	SOIL	Analysis Date:	09/14/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSP
% Moisture:	21.2	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.4	12.7	ND		UG/KG	1
Vinyl Chloride	2.3	12.7	ND		UG/KG	1
Bromomethane	1.6	12.7	ND		UG/KG	1
Chloroethane	2	12.7	ND		UG/KG	1
1,1-Dichloroethene	1.1	6.3	ND		UG/KG	1
Methylene Chloride	3	6.3	6.2	JB	UG/KG	1
trans-1,2-Dichloroethene	1	6.3	ND		UG/KG	1
1,1-Dichloroethane	[illegible]	6.3	ND		UG/KG	1
Carbon disulfide	[illegible]	6.3	ND		UG/KG	1
cis-1,2-Dichloroethene	[illegible]	6.3	ND		UG/KG	1
Bromochloromethane	1	6.3	ND		UG/KG	1
Chloroform	0.86	6.3	ND		UG/KG	1
1,1,1-Trichloroethane	0.39	6.3	ND		UG/KG	1
Carbon Tetrachloride	0.77	6.3	ND		UG/KG	1
Benzene	0.72	6.3	ND		UG/KG	1
1,2-Dichloroethane	0.47	6.3	ND		UG/KG	1
Trichloroethene	1.1	6.3	ND		UG/KG	1
1,2-Dichloropropane	0.43	6.3	ND		UG/KG	1
Bromodichloromethane	0.29	6.3	ND		UG/KG	1
cis-1,3-Dichloropropene	0.82	6.3	ND		UG/KG	1
Toluene	0.39	6.3	ND		UG/KG	1
trans-1,3-Dichloropropene	0.79	6.3	ND		UG/KG	1
1,1,2-Trichloroethane	0.33	6.3	ND		UG/KG	1
Tetrachloroethene	0.6	6.3	ND		UG/KG	1
Dibromochloromethane	0.29	6.3	ND		UG/KG	1
Chlorobenzene	0.27	6.3	ND		UG/KG	1
Ethyl Benzene	0.46	6.3	ND		UG/KG	1
m & p-Xylene	1	6.3	ND		UG/KG	1
o-Xylene	1.1	6.3	ND		UG/KG	1
Styrene	0.44	6.3	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/09/2002

Project Name:	USACE FT DEARBORN	Analysis:	VOLATILES, GC/MS (8260)
Project No.	17297	Analytical Method:	8260B
		Prep Method:	5030A

Field ID:	FSS-002-04-ESW	ARDL Lab No.:	301103-04 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2592
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0746	Prep. Date:	09/14/2002
Matrix:	SOIL	Analysis Date:	09/14/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSP
% Moisture:	21.2	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.28	6.3	ND		UG/KG	1
2-Hexanone	22.8	25.4	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.9	6.3	ND		UG/KG	1
Acetone	40.6	63.5	ND		UG/KG	1
2-Butanone	21.6	63.5	ND		UG/KG	1
4-Methyl-2-pentanone	19	25.4	ND		UG/KG	1

1,2-Dichloroethane-d4	78-135	106%
Toluene-d8	86-129	108%
4-Bromofluorobenzene	76-141	104%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FSS-001-04-ESW	ARDL Lab No.:	301103-05
Desc/Location:	NONE	Lab Filename:	Y2593
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0808	Prep. Date:	09/14/2002
Matrix:	SOIL	Analysis Date:	09/14/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSP
% Moisture:	19.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.4	12.5	ND		UG/KG	1
Vinyl Chloride	2.2	12.5	ND		UG/KG	1
Bromomethane	1.6	12.5	ND		UG/KG	1
Chloroethane	2	12.5	ND		UG/KG	1
1,1-Dichloroethene	1	6.2	ND		UG/KG	1
Methylene Chloride	3	6.2	7.6	B	UG/KG	1
trans-1,2-Dichloroethene	0.98	6.2	ND		UG/KG	1
1,1-Dichloroethane	[illegible]	6.2	ND		UG/KG	1
Carbon disulfide	[illegible]	6.2	ND		UG/KG	1
cis-1,2-Dichloroethene	[illegible]	6.2	ND		UG/KG	1
Bromochloromethane	1	6.2	ND		UG/KG	1
Chloroform	0.85	6.2	ND		UG/KG	1
1,1,1-Trichloroethane	0.39	6.2	ND		UG/KG	1
Carbon Tetrachloride	0.76	6.2	ND		UG/KG	1
Benzene	0.71	6.2	ND		UG/KG	1
1,2-Dichloroethane	0.46	6.2	ND		UG/KG	1
Trichloroethene	1.1	6.2	ND		UG/KG	1
1,2-Dichloropropane	0.42	6.2	ND		UG/KG	1
Bromodichloromethane	0.29	6.2	ND		UG/KG	1
cis-1,3-Dichloropropene	0.81	6.2	ND		UG/KG	1
Toluene	0.39	6.2	ND		UG/KG	1
trans-1,3-Dichloropropene	0.77	6.2	ND		UG/KG	1
1,1,2-Trichloroethane	0.32	6.2	ND		UG/KG	1
Tetrachloroethene	0.59	6.2	ND		UG/KG	1
Dibromochloromethane	0.29	6.2	ND		UG/KG	1
Chlorobenzene	0.26	6.2	ND		UG/KG	1
Ethyl Benzene	0.45	6.2	ND		UG/KG	1
m & p-Xylene	1	6.2	ND		UG/KG	1
o-Xylene	1.1	6.2	ND		UG/KG	1
Styrene	0.44	6.2	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 09/24/2002

Project Name:	USACE FT DEARBORN	Analysis: VOLATILES, GC/MS (8260)	
Project No.	17297	Analytical Method: 8260B	
		Prep Method: 5030A	

Field ID:	FSS-001-04-ESW	ARDL Lab No.:	301103-05 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2593
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0808	Prep. Date:	09/14/2002
Matrix:	SOIL	Analysis Date:	09/14/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSP
% Moisture:	19.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.27	6.2	ND		UG/KG	1
2-Hexanone	22.4	24.9	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.9	6.2	ND		UG/KG	1
Acetone	39.9	62.3	ND		UG/KG	1
2-Butanone	21.2	62.3	ND		UG/KG	1
4-Methyl-2-pentanone	18.7	24.9	ND		UG/KG	1

SURROGATE RECOVERIES:		
Dibromofluoromethane	[illegible]	[illegible]
1,2-Dichloroethane-d4	78-135	102%
Toluene-d8	86-129	104%
4-Bromofluorobenzene	76-141	108%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FSS-008-04-ESW	ARDL Lab No.:	301103-06
Desc/Location:	NONE	Lab Filename:	Y2594
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0808	Prep. Date:	09/14/2002
Matrix:	SOIL	Analysis Date:	09/14/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSP
% Moisture:	20.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.4	12.6	ND		UG/KG	1
Vinyl Chloride	2.3	12.6	ND		UG/KG	1
Bromomethane	1.6	12.6	ND		UG/KG	1
Chloroethane	2	12.6	ND		UG/KG	1
1,1-Dichloroethene	1	6.3	ND		UG/KG	1
Methylene Chloride	3	6.3	6.2	JB	UG/KG	1
trans-1,2-Dichloroethene	0.99	6.3	ND		UG/KG	1
1,1-Dichloroethane	0.99	6.3	ND		UG/KG	1
Carbon disulfide	1.1	6.3	ND		UG/KG	1
cis-1,2-Dichloroethene	0.41	6.3	ND		UG/KG	1
Bromochloromethane	1	6.3	ND		UG/KG	1
Chloroform	0.86	6.3	ND		UG/KG	1
1,1,1-Trichloroethane	0.39	6.3	ND		UG/KG	1
Carbon Tetrachloride	0.77	6.3	ND		UG/KG	1
Benzene	0.72	6.3	ND		UG/KG	1
1,2-Dichloroethane	0.47	6.3	ND		UG/KG	1
Trichloroethene	1.1	6.3	ND		UG/KG	1
1,2-Dichloropropane	0.43	6.3	ND		UG/KG	1
Bromodichloromethane	0.29	6.3	ND		UG/KG	1
cis-1,3-Dichloropropene	0.82	6.3	ND		UG/KG	1
Toluene	0.39	6.3	ND		UG/KG	1
trans-1,3-Dichloropropene	0.78	6.3	ND		UG/KG	1
1,1,2-Trichloroethane	0.33	6.3	ND		UG/KG	1
Tetrachloroethene	0.59	6.3	ND		UG/KG	1
Dibromochloromethane	0.29	6.3	ND		UG/KG	1
Chlorobenzene	0.26	6.3	ND		UG/KG	1
Ethyl Benzene	0.45	6.3	ND		UG/KG	1
m & p-Xylene	1	6.3	ND		UG/KG	1
o-Xylene	1.1	6.3	ND		UG/KG	1
Styrene	0.44	6.3	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 09/24/2002

Project Name:	USACE FT DEARBORN	Analysis: VOLATILES, GC/MS (8260)	
Project No.	17297	Analytical Method: 8260B	
		Prep Method: 5030A	

Field ID:	FSS-008-04-ESW	ARDL Lab No.:	301103-06 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2594
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0808	Prep. Date:	09/14/2002
Matrix:	SOIL	Analysis Date:	09/14/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSP
% Moisture:	20.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.28	6.3	ND		UG/KG	1
2-Hexanone	22.6	25.2	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.9	6.3	ND		UG/KG	1
Acetone	40.3	62.9	ND		UG/KG	1
2-Butanone	21.4	62.9	ND		UG/KG	1
4-Methyl-2-pentanone	18.9	25.2	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	[illegible]	[illegible]
1,2-Dichloroethane-d4	78-135	101%
Toluene-d8	86-129	107%
4-Bromofluorobenzene	76-141	111%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-001-03-ESW	ARDL Lab No.:	301103-07
Desc/Location:	NONE	Lab Filename:	Y2672
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0934	Prep. Date:	09/19/2002
Matrix:	SOIL	Analysis Date:	09/19/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSQ
% Moisture:	18.2	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	12.2	ND		UG/KG	1
Vinyl Chloride	2.2	12.2	ND		UG/KG	1
Bromomethane	1.6	12.2	ND		UG/KG	1
Chloroethane	2	12.2	ND		UG/KG	1
1,1-Dichloroethene	1	6.1	ND		UG/KG	1
Methylene Chloride	2.9	6.1	ND		UG/KG	1
trans-1,2-Dichloroethene	0.97	6.1	ND		UG/KG	1
1,1-Dichloroethane	0.2[illegible]	6.1	ND		UG/KG	1
Carbon disulfide	1.1	6.1	ND		UG/KG	1
cis-1,2-Dichloroethene	0.[illegible]	6.1	ND		UG/KG	1
Bromochloromethane	0.99	6.1	ND		UG/KG	1
Chloroform	0.83	6.1	ND		UG/KG	1
1,1,1-Trichloroethane	0.38	6.1	ND		UG/KG	1
Carbon Tetrachloride	0.75	6.1	ND		UG/KG	1
Benzene	0.7	6.1	ND		UG/KG	1
1,2-Dichloroethane	0.45	6.1	ND		UG/KG	1
Trichloroethene	1.1	6.1	ND		UG/KG	1
1,2-Dichloropropane	0.42	6.1	ND		UG/KG	1
Bromodichloromethane	0.28	6.1	ND		UG/KG	1
cis-1,3-Dichloropropene	0.79	6.1	ND		UG/KG	1
Toluene	0.38	6.1	ND		UG/KG	1
trans-1,3-Dichloropropene	0.76	6.1	ND		UG/KG	1
1,1,2-Trichloroethane	0.32	6.1	ND		UG/KG	1
Tetrachloroethene	0.57	6.1	ND		UG/KG	1
Dibromochloromethane	0.28	6.1	ND		UG/KG	1
Chlorobenzene	0.26	6.1	ND		UG/KG	1
Ethyl Benzene	0.44	6.1	ND		UG/KG	1
m & p-Xylene	0.98	6.1	ND		UG/KG	1
o-Xylene	1.1	6.1	ND		UG/KG	1
Styrene	0.43	6.1	ND		UG/KG	1

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Lab Report No: 301103 **Report Date:** 09/24/2002

Project Name:	USACE FT DEARBORN	Analysis:	VOLATILES, GC/MS (8260)
Project No.	17297	Analytical Method:	8260B
		Prep Method:	5030A

Field ID:	VWR-001-03-ESW	ARDL Lab No.:	301103-07 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2672
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0934	Prep. Date:	09/19/2002
Matrix:	SOIL	Analysis Date:	09/19/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSQ
% Moisture:	18.2	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.27	6.1	ND		UG/KG	1
2-Hexanone	22	24.4	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	6.1	ND		UG/KG	1
Acetone	39.1	61.1	ND		UG/KG	1
2-Butanone	20.8	61.1	ND		UG/KG	1
4-Methyl-2-pentanone	10.3	24.4	ND		UG/KG	1

[illegible]		
Dibromofluoromethane		[illegible]
1,2-Dichloroethane-d4	70-135	90%
Toluene-d8	86-129	105%
4-Bromofluorobenzene	76-141	111%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

BNA-8270

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/04/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3510B

Field ID:	VWR-002-02-ERB	ARDL Lab No.:	301103-01
Desc/Location:	NONE	Lab Filename:	T6991
Sample Date:	09/12/2002	Received Date:	09/14/2002
Sample Time:	1500	Prep. Date:	09/18/2002
Matrix:	WATER	Analysis Date:	09/30/2002
Amount Used:	1000 mL	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5013
% Moisture:	NA	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	1	10.0	ND		UG/L	1
bis(2-Chloroethyl)ether	0.5	10.0	ND		UG/L	1
2-Chlorophenol	2.1	10.0	ND		UG/L	1
1,3-Dichlorobenzene	1.2	10.0	ND		UG/L	1
1,4-Dichlorobenzene	1.1	10.0	ND		UG/L	1
1,2-Dichlorobenzene	1.1	10.0	ND		UG/L	1
2-Methylphenol	1.6	10.0	ND		UG/L	1
bis(2-Chloroisopropyl)ether	0.48	10.0	ND		UG/L	1
4-Methylphenol	1.5	10.0	ND		UG/L	1
N-Nitroso-di-n-propylamine	0.58	10.0	ND		UG/L	1
Hexachloroethane	1.1	10.0	ND		UG/L	1
Nitrobenzene	0.92	10.0	ND		UG/L	1
Isophorone	1.1	10.0	ND		UG/L	1
2-Nitrophenol	2.2	10.0	ND		UG/L	1
2,4-Dimethylphenol	1.8	10.0	ND		UG/L	1
bis(2-Chloroethoxy)methane	0.47	10.0	ND		UG/L	1
2,4-Dichlorophenol	1.7	10.0	ND		UG/L	1
1,2,4-Trichlorobenzene	1	10.0	ND		UG/L	1
Naphthalene	0.25	10.0	ND		UG/L	1
4-Chloroaniline	0.82	10.0	ND		UG/L	1
Hexachlorobutadiene	1.2	10.0	ND		UG/L	1
4-Chloro-3-methylphenol	1.9	10.0	ND		UG/L	1
2-Methylnaphthalene	1.1	10.0	ND		UG/L	1
Hexachlorocyclopentadiene	1	10.0	ND		UG/L	1
2,4,6-Trichlorophenol	2.2	10.0	ND		UG/L	1
2,4,5-Trichlorophenol	2	10.0	ND		UG/L	1
2-Chloronaphthalene	1	10.0	ND		UG/L	1
2-Nitroaniline	1.1	10.0	ND		UG/L	1
Dimethylphthalate	0.4	10.0	ND		UG/L	1
2,6-Dinitrotoluene	0.58	10.0	ND		UG/L	1

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Lab Report No: 301103 Report Date: 10/04/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3510B

Field ID:	VWR-002-02-ERB	ARDL Lab No.:	301103-01 (cont'd)
Desc/Location:	NONE	Lab Filename:	T6991
Sample Date:	09/12/2002	Received Date:	09/14/2002
Sample Time:	1500	Prep. Date:	09/18/2002
Matrix:	WATER	Analysis Date:	09/30/2002
Amount Used:	1000 mL	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5013
% Moisture:	NA	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	1.4	10.0	ND		UG/L	1
2,4-Dinitrophenol	1.7	10.0	ND		UG/L	1
4-Nitrophenol	1.5	10.0	ND		UG/L	1
Dibenzofuran	1.2	10.0	ND		UG/L	1
2,4-Dinitrotoluene	0.8	10.0	ND		UG/L	1
Diethylphthalate	0.44	10.0	ND		UG/L	1
4-Chlorophenyl-phenylether	0.44	10.0	ND		UG/L	1
4-Nitroaniline	1.2	10.0	ND		UG/L	1
4,6-Dinitro-2-methylphenol	1.6	10.0	ND		UG/L	1
N-Nitrosodiphenylamine	0.4	10.0	ND		UG/L	1
4-Bromophenyl-phenylether	0.4	10.0	ND		UG/L	1
Hexachlorobenzene	0.91	10.0	ND		UG/L	1
Pentachlorophenol	1.9	10.0	ND		UG/L	1
Di-n-butylphthalate	1.1	10.0	ND		UG/L	1
Butylbenzylphthalate	0.32	10.0	ND		UG/L	1
3,3'-Dichlorobenzidine	2.8	10.0	ND		UG/L	1
bis(2-Ethylhexyl)phthalate	0.87	10.0	ND		UG/L	1
Di-n-octylphthalate	0.37	10.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	21-110	39%
Phenol-d5	10-94	30%
Nitrobenzene-d5	35-114	67%
2-Fluorobiphenyl	43-116	76%
2,4,6-Tribromophenol	10-123	64%
Terphenyl-d14	33-141	67%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/09/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-004-04-ESW	ARDL Lab No.:	301103-02
Desc/Location:	NONE	Lab Filename:	T7055
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0730	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/07/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	18.4	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	140	404	ND		UG/KG	1
bis(2-Chloroethyl)ether	29.5	404	ND		UG/KG	1
2-Chlorophenol	129	404	ND		UG/KG	1
1,3-Dichlorobenzene	65.4	404	ND		UG/KG	1
1,4-Dichlorobenzene	52.2	404	ND		UG/KG	1
1,2-Dichlorobenzene	59.4	404	ND		UG/KG	1
2-Methylphenol	115	404	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	23.4	404	ND		UG/KG	1
4-Methylphenol	146	404	ND		UG/KG	1
N-Nitroso-di-n-propylamine	27.7	404	ND		UG/KG	1
Hexachloroethane	60.4	404	ND		UG/KG	1
Nitrobenzene	75.9	404	ND		UG/KG	1
Isophorone	60.8	404	ND		UG/KG	1
2-Nitrophenol	125	404	ND		UG/KG	1
2,4-Dimethylphenol	138	404	ND		UG/KG	1
bis(2-Chloroethoxy)methane	30.5	404	ND		UG/KG	1
2,4-Dichlorophenol	148	404	ND		UG/KG	1
1,2,4-Trichlorobenzene	62.4	404	ND		UG/KG	1
Naphthalene	16.8	404	ND		UG/KG	1
4-Chloroaniline	93	404	ND		UG/KG	1
Hexachlorobutadiene	71.2	404	ND		UG/KG	1
4-Chloro-3-methylphenol	121	404	ND		UG/KG	1
2-Methylnaphthalene	76.1	404	ND		UG/KG	1
Hexachlorocyclopentadiene	61.6	404	ND		UG/KG	1
2,4,6-Trichlorophenol	130	404	ND		UG/KG	1
2,4,5-Trichlorophenol	137	404	ND		UG/KG	1
2-Chloronaphthalene	59.8	404	ND		UG/KG	1
2-Nitroaniline	62.9	404	ND		UG/KG	1
Dimethylphthalate	25.4	404	ND		UG/KG	1
2,6-Dinitrotoluene	51.8	404	ND		UG/KG	1

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Lab Report No: 301103 Report Date: 10/09/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-004-04-ESW	ARDL Lab No.:	301103-02 (cont'd)
Desc/Location:	NONE	Lab Filename:	T7055
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0730	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/07/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	18.4	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	46.8	404	ND		UG/KG	1
2,4-Dinitrophenol	125	404	ND		UG/KG	1
4-Nitrophenol	110	404	ND		UG/KG	1
Dibenzofuran	82	404	ND		UG/KG	1
2,4-Dinitrotoluene	60.2	404	ND		UG/KG	1
Diethylphthalate	17.6	404	ND		UG/KG	1
4-Chlorophenyl-phenylether	26.3	404	ND		UG/KG	1
4-Nitroaniline	49	404	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	109	404	ND		UG/KG	1
N-Nitrosodiphenylamine	25.4	404	ND		UG/KG	1
4-Bromophenyl-phenylether	30	404	ND		UG/KG	1
Hexachlorobenzene	50.9	404	ND		UG/KG	1
Pentachlorophenol	101	404	ND		UG/KG	1
Di-n-butylphthalate	32.4	404	ND		UG/KG	1
Butylbenzylphthalate	24.9	404	ND		UG/KG	1
3,3'-Dichlorobenzidine	167	404	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	27	404	ND		UG/KG	1
Di-n-octylphthalate	53.9	404	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	51%
Phenol-d5	24-113	64%
Nitrobenzene-d5	23-120	51%
2-Fluorobiphenyl	30-115	70%
2,4,6-Tribromophenol	19-122	96%
Terphenyl-d14	18-137	64%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Lab Report No: 301103 Report Date: 10/09/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-003-04-ESW	ARDL Lab No.:	301103-03
Desc/Location:	NONE	Lab Filename:	T7056
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0735	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/07/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	17.4	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	138	400	ND		UG/KG	1
bis(2-Chloroethyl)ether	29.2	400	ND		UG/KG	1
2-Chlorophenol	127	400	ND		UG/KG	1
1,3-Dichlorobenzene	64.6	400	ND		UG/KG	1
1,4-Dichlorobenzene	51.6	400	ND		UG/KG	1
1,2-Dichlorobenzene	58.7	400	ND		UG/KG	1
2-Methylphenol	114	400	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	23.1	400	ND		UG/KG	1
4-Methylphenol	144	400	ND		UG/KG	1
N-Nitroso-di-n-propylamine	27.4	400	ND		UG/KG	1
Hexachloroethane	59.7	400	ND		UG/KG	1
Nitrobenzene	74.9	400	ND		UG/KG	1
Isophorone	60	400	ND		UG/KG	1
2-Nitrophenol	123	400	ND		UG/KG	1
2,4-Dimethylphenol	137	400	ND		UG/KG	1
bis(2-Chloroethoxy)methane	30.1	400	ND		UG/KG	1
2,4-Dichlorophenol	146	400	ND		UG/KG	1
1,2,4-Trichlorobenzene	61.6	400	ND		UG/KG	1
Naphthalene	16.6	400	ND		UG/KG	1
4-Chloroaniline	91.9	400	ND		UG/KG	1
Hexachlorobutadiene	70.3	400	ND		UG/KG	1
4-Chloro-3-methylphenol	119	400	ND		UG/KG	1
2-Methylnaphthalene	75.2	400	99.2	J	UG/KG	1
Hexachlorocyclopentadiene	60.9	400	ND		UG/KG	1
2,4,6-Trichlorophenol	128	400	ND		UG/KG	1
2,4,5-Trichlorophenol	136	400	ND		UG/KG	1
2-Chloronaphthalene	59.1	400	ND		UG/KG	1
2-Nitroaniline	62.1	400	ND		UG/KG	1
Dimethylphthalate	25.1	400	ND		UG/KG	1
2,6-Dinitrotoluene	51.2	400	ND		UG/KG	1

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Lab Report No: 301103 Report Date: 10/09/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-003-04-ESW	ARDL Lab No.:	301103-03 (cont'd)
Desc/Location:	NONE	Lab Filename:	T7056
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0735	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/07/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	17.4	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	46.2	400	ND		UG/KG	1
2,4-Dinitrophenol	123	400	ND		UG/KG	1
4-Nitrophenol	109	400	ND		UG/KG	1
Dibenzofuran	81	400	ND		UG/KG	1
2,4-Dinitrotoluene	59.4	400	ND		UG/KG	1
Diethylphthalate	17.4	400	ND		UG/KG	1
4-Chlorophenyl-phenylether	26	400	ND		UG/KG	1
4-Nitroaniline	48.4	400	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	108	400	ND		UG/KG	1
N-Nitrosodiphenylamine	25.1	400	ND		UG/KG	1
4-Bromophenyl-phenylether	29.7	400	ND		UG/KG	1
Hexachlorobenzene	50.2	400	ND		UG/KG	1
Pentachlorophenol	100	400	ND		UG/KG	1
Di-n-butylphthalate	32	400	ND		UG/KG	1
Butylbenzylphthalate	24.6	400	ND		UG/KG	1
3,3'-Dichlorobenzidine	165	400	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	26.6	400	ND		UG/KG	1
Di-n-octylphthalate	53.3	400	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	54%
Phenol-d5	24-113	65%
Nitrobenzene-d5	23-120	57%
2-Fluorobiphenyl	30-115	72%
2,4,6-Tribromophenol	19-122	103%
Terphenyl-d14	18-137	66%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/09/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-002-04-ESW	ARDL Lab No.:	301103-04
Desc/Location:	NONE	Lab Filename:	T7057
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0746	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/07/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	21.2	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	145	419	ND		UG/KG	1
bis(2-Chloroethyl)ether	30.6	419	ND		UG/KG	1
2-Chlorophenol	133	419	ND		UG/KG	1
1,3-Dichlorobenzene	67.8	419	ND		UG/KG	1
1,4-Dichlorobenzene	54.1	419	ND		UG/KG	1
1,2-Dichlorobenzene	61.5	419	ND		UG/KG	1
2-Methylphenol	119	419	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	24.2	419	ND		UG/KG	1
4-Methylphenol	151	419	ND		UG/KG	1
N-Nitroso-di-n-propylamine	28.7	419	ND		UG/KG	1
Hexachloroethane	62.6	419	ND		UG/KG	1
Nitrobenzene	78.6	419	ND		UG/KG	1
Isophorone	62.9	419	ND		UG/KG	1
2-Nitrophenol	129	419	ND		UG/KG	1
2,4-Dimethylphenol	143	419	ND		UG/KG	1
bis(2-Chloroethoxy)methane	31.6	419	ND		UG/KG	1
2,4-Dichlorophenol	154	419	ND		UG/KG	1
1,2,4-Trichlorobenzene	64.6	419	ND		UG/KG	1
Naphthalene	17.4	419	ND		UG/KG	1
4-Chloroaniline	96.3	419	ND		UG/KG	1
Hexachlorobutadiene	73.7	419	ND		UG/KG	1
4-Chloro-3-methylphenol	125	419	ND		UG/KG	1
2-Methylnaphthalene	78.8	419	ND		UG/KG	1
Hexachlorocyclopentadiene	63.8	419	ND		UG/KG	1
2,4,6-Trichlorophenol	135	419	ND		UG/KG	1
2,4,5-Trichlorophenol	142	419	ND		UG/KG	1
2-Chloronaphthalene	61.9	419	ND		UG/KG	1
2-Nitroaniline	65.1	419	ND		UG/KG	1
Dimethylphthalate	26.3	419	ND		UG/KG	1
2,6-Dinitrotoluene	53.7	419	ND		UG/KG	1

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Lab Report No: 301103 Report Date: 10/09/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-002-04-ESW	ARDL Lab No.:	301103-04 (cont'd)
Desc/Location:	NONE	Lab Filename:	T7057
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0746	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/07/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	21.2	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	48.5	419	ND		UG/KG	1
2,4-Dinitrophenol	129	419	ND		UG/KG	1
4-Nitrophenol	114	419	ND		UG/KG	1
Dibenzofuran	84.9	419	ND		UG/KG	1
2,4-Dinitrotoluene	62.3	419	ND		UG/KG	1
Diethylphthalate	18.3	419	ND		UG/KG	1
4-Chlorophenyl-phenylether	27.3	419	ND		UG/KG	1
4-Nitroaniline	50.8	419	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	113	419	ND		UG/KG	1
N-Nitrosodiphenylamine	26.3	419	ND		UG/KG	1
4-Bromophenyl-phenylether	31.1	419	ND		UG/KG	1
Hexachlorobenzene	52.7	419	ND		UG/KG	1
Pentachlorophenol	105	419	ND		UG/KG	1
Di-n-butylphthalate	33.5	419	ND		UG/KG	1
Butylbenzylphthalate	25.8	419	ND		UG/KG	1
3,3'-Dichlorobenzidine	173	419	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	27.9	419	ND		UG/KG	1
Di-n-octylphthalate	55.8	419	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	59%
Phenol-d5	24-113	69%
Nitrobenzene-d5	23-120	53%
2-Fluorobiphenyl	30-115	75%
2,4,6-Tribromophenol	19-122	113%
Terphenyl-d14	18-137	67%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/09/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-001-04-ESW	ARDL Lab No.:	301103-05
Desc/Location:	NONE	Lab Filename:	T7058
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0808	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/07/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	19.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	142	411	ND		UG/KG	1
bis(2-Chloroethyl)ether	30	411	ND		UG/KG	1
2-Chlorophenol	131	411	ND		UG/KG	1
1,3-Dichlorobenzene	66.5	411	ND		UG/KG	1
1,4-Dichlorobenzene	53.1	411	ND		UG/KG	1
1,2-Dichlorobenzene	60.4	411	ND		UG/KG	1
2-Methylphenol	117	411	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	23.8	411	ND		UG/KG	1
4-Methylphenol	148	411	ND		UG/KG	1
N-Nitroso-di-n-propylamine	28.1	411	ND		UG/KG	1
Hexachloroethane	61.4	411	ND		UG/KG	1
Nitrobenzene	77.1	411	ND		UG/KG	1
Isophorone	61.8	411	ND		UG/KG	1
2-Nitrophenol	127	411	ND		UG/KG	1
2,4-Dimethylphenol	141	411	ND		UG/KG	1
bis(2-Chloroethoxy)methane	31	411	ND		UG/KG	1
2,4-Dichlorophenol	151	411	ND		UG/KG	1
1,2,4-Trichlorobenzene	63.4	411	ND		UG/KG	1
Naphthalene	17.1	411	ND		UG/KG	1
4-Chloroaniline	94.5	411	ND		UG/KG	1
Hexachlorobutadiene	72.4	411	ND		UG/KG	1
4-Chloro-3-methylphenol	123	411	ND		UG/KG	1
2-Methylnaphthalene	77.3	411	ND		UG/KG	1
Hexachlorocyclopentadiene	62.6	411	ND		UG/KG	1
2,4,6-Trichlorophenol	132	411	ND		UG/KG	1
2,4,5-Trichlorophenol	139	411	ND		UG/KG	1
2-Chloronaphthalene	60.8	411	ND		UG/KG	1
2-Nitroaniline	63.9	411	ND		UG/KG	1
Dimethylphthalate	25.8	411	ND		UG/KG	1
2,6-Dinitrotoluene	52.7	411	ND		UG/KG	1

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Lab Report No: 301103 Report Date: 10/09/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-001-04-ESW	ARDL Lab No.:	301103-05 (cont'd)
Desc/Location:	NONE	Lab Filename:	T7058
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0808	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/07/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	19.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	47.6	411	ND		UG/KG	1
2,4-Dinitrophenol	127	411	ND		UG/KG	1
4-Nitrophenol	112	411	ND		UG/KG	1
Dibenzofuran	83.3	411	ND		UG/KG	1
2,4-Dinitrotoluene	61.1	411	ND		UG/KG	1
Diethylphthalate	17.9	411	ND		UG/KG	1
4-Chlorophenyl-phenylether	26.8	411	ND		UG/KG	1
4-Nitroaniline	49.8	411	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	111	411	ND		UG/KG	1
N-Nitrosodiphenylamine	25.8	411	ND		UG/KG	1
4-Bromophenyl-phenylether	30.5	411	ND		UG/KG	1
Hexachlorobenzene	51.7	411	ND		UG/KG	1
Pentachlorophenol	103	411	ND		UG/KG	1
Di-n-butylphthalate	32.9	411	ND		UG/KG	1
Butylbenzylphthalate	25.3	411	ND		UG/KG	1
3,3'-Dichlorobenzidine	169	411	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	27.4	411	ND		UG/KG	1
Di-n-octylphthalate	54.8	411	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	54%
Phenol-d5	24-113	65%
Nitrobenzene-d5	23-120	57%
2-Fluorobiphenyl	30-115	71%
2,4,6-Tribromophenol	19-122	100%
Terphenyl-d14	18-137	63%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/09/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-008-04-ESW	ARDL Lab No.:	301103-06
Desc/Location:	NONE	Lab Filename:	T7059
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0808	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/07/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	20.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	143	415	ND		UG/KG	1
bis(2-Chloroethyl)ether	30.3	415	ND		UG/KG	1
2-Chlorophenol	132	415	ND		UG/KG	1
1,3-Dichlorobenzene	67.2	415	ND		UG/KG	1
1,4-Dichlorobenzene	53.6	415	ND		UG/KG	1
1,2-Dichlorobenzene	61	415	ND		UG/KG	1
2-Methylphenol	118	415	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	24	415	ND		UG/KG	1
4-Methylphenol	150	415	ND		UG/KG	1
N-Nitroso-di-n-propylamine	28.4	415	ND		UG/KG	1
Hexachloroethane	62	415	ND		UG/KG	1
Nitrobenzene	77.9	415	ND		UG/KG	1
Isophorone	62.4	415	ND		UG/KG	1
2-Nitrophenol	128	415	ND		UG/KG	1
2,4-Dimethylphenol	142	415	ND		UG/KG	1
bis(2-Chloroethoxy)methane	31.3	415	ND		UG/KG	1
2,4-Dichlorophenol	152	415	ND		UG/KG	1
1,2,4-Trichlorobenzene	64	415	ND		UG/KG	1
Naphthalene	17.2	415	ND		UG/KG	1
4-Chloroaniline	95.5	415	ND		UG/KG	1
Hexachlorobutadiene	73.1	415	ND		UG/KG	1
4-Chloro-3-methylphenol	124	415	ND		UG/KG	1
2-Methylnaphthalene	78.1	415	ND		UG/KG	1
Hexachlorocyclopentadiene	63.3	415	ND		UG/KG	1
2,4,6-Trichlorophenol	133	415	ND		UG/KG	1
2,4,5-Trichlorophenol	141	415	ND		UG/KG	1
2-Chloronaphthalene	61.4	415	ND		UG/KG	1
2-Nitroaniline	64.5	415	ND		UG/KG	1
Dimethylphthalate	26	415	ND		UG/KG	1
2,6-Dinitrotoluene	53.2	415	ND		UG/KG	1

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Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/09/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-008-04-ESW	ARDL Lab No.:	301103-06 (cont'd)
Desc/Location:	NONE	Lab Filename:	T7059
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0808	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/07/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	20.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	48.1	415	ND		UG/KG	1
2,4-Dinitrophenol	128	415	ND		UG/KG	1
4-Nitrophenol	113	415	ND		UG/KG	1
Dibenzofuran	84.2	415	ND		UG/KG	1
2,4-Dinitrotoluene	61.8	415	ND		UG/KG	1
Diethylphthalate	18.1	415	ND		UG/KG	1
4-Chlorophenyl-phenylether	27	415	ND		UG/KG	1
4-Nitroaniline	50.3	415	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	112	415	ND		UG/KG	1
N-Nitrosodiphenylamine	26	415	ND		UG/KG	1
4-Bromophenyl-phenylether	30.8	415	ND		UG/KG	1
Hexachlorobenzene	52.2	415	ND		UG/KG	1
Pentachlorophenol	104	415	ND		UG/KG	1
Di-n-butylphthalate	33.2	415	ND		UG/KG	1
Butylbenzylphthalate	25.5	415	ND		UG/KG	1
3,3'-Dichlorobenzidine	171	415	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	27.7	415	ND		UG/KG	1
Di-n-octylphthalate	55.3	415	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	54%
Phenol-d5	24-113	64%
Nitrobenzene-d5	23-120	50%
2-Fluorobiphenyl	30-115	69%
2,4,6-Tribromophenol	19-122	105%
Terphenyl-d14	18-137	63%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/09/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-001-03-ESW	ARDL Lab No.:	301103-07
Desc/Location:	NONE	Lab Filename:	T7062
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0934	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/08/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	18.2	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	139	403	ND		UG/KG	1
bis(2-Chloroethyl)ether	29.5	403	ND		UG/KG	1
2-Chlorophenol	128	403	ND		UG/KG	1
1,3-Dichlorobenzene	65.3	403	ND		UG/KG	1
1,4-Dichlorobenzene	52.1	403	ND		UG/KG	1
1,2-Dichlorobenzene	59.3	403	ND		UG/KG	1
2-Methylphenol	115	403	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	23.3	403	ND		UG/KG	1
4-Methylphenol	145	403	ND		UG/KG	1
N-Nitroso-di-n-propylamine	27.6	403	ND		UG/KG	1
Hexachloroethane	60.3	403	ND		UG/KG	1
Nitrobenzene	75.7	403	ND		UG/KG	1
Isophorone	60.6	403	ND		UG/KG	1
2-Nitrophenol	125	403	ND		UG/KG	1
2,4-Dimethylphenol	138	403	ND		UG/KG	1
bis(2-Chloroethoxy)methane	30.4	403	ND		UG/KG	1
2,4-Dichlorophenol	148	403	ND		UG/KG	1
1,2,4-Trichlorobenzene	62.2	403	ND		UG/KG	1
Naphthalene	16.7	403	ND		UG/KG	1
4-Chloroaniline	92.8	403	ND		UG/KG	1
Hexachlorobutadiene	71	403	ND		UG/KG	1
4-Chloro-3-methylphenol	120	403	ND		UG/KG	1
2-Methylnaphthalene	75.9	403	ND		UG/KG	1
Hexachlorocyclopentadiene	61.5	403	ND		UG/KG	1
2,4,6-Trichlorophenol	130	403	ND		UG/KG	1
2,4,5-Trichlorophenol	137	403	ND		UG/KG	1
2-Chloronaphthalene	59.7	403	ND		UG/KG	1
2-Nitroaniline	62.7	403	ND		UG/KG	1
Dimethylphthalate	25.3	403	ND		UG/KG	1
2,6-Dinitrotoluene	51.7	403	ND		UG/KG	1

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Lab Report No: 301103 Report Date: 10/09/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-001-03-ESW	ARDL Lab No.:	301103-07 (cont'd)
Desc/Location:	NONE	Lab Filename:	T7062
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0934	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/08/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	18.2	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	46.7	403	ND		UG/KG	1
2,4-Dinitrophenol	125	403	ND		UG/KG	1
4-Nitrophenol	110	403	ND		UG/KG	1
Dibenzofuran	81.8	403	ND		UG/KG	1
2,4-Dinitrotoluene	60	403	ND		UG/KG	1
Diethylphthalate	17.6	403	ND		UG/KG	1
4-Chlorophenyl-phenylether	26.3	403	ND		UG/KG	1
4-Nitroaniline	48.9	403	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	109	403	ND		UG/KG	1
N-Nitrosodiphenylamine	25.3	403	ND		UG/KG	1
4-Bromophenyl-phenylether	30	403	ND		UG/KG	1
Hexachlorobenzene	50.7	403	ND		UG/KG	1
Pentachlorophenol	101	403	ND		UG/KG	1
Di-n-butylphthalate	32.3	403	ND		UG/KG	1
Butylbenzylphthalate	24.8	403	ND		UG/KG	1
3,3'-Dichlorobenzidine	166	403	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	26.9	403	ND		UG/KG	1
Di-n-octylphthalate	53.8	403	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	52%
Phenol-d5	24-113	64%
Nitrobenzene-d5	23-120	52%
2-Fluorobiphenyl	30-115	73%
2,4,6-Tribromophenol	19-122	116%
Terphenyl-d14	18-137	65%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

PCB's-8082

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3510B

Field ID:	VWR-002-02-ERB	ARDL Lab No.:	301103-01
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/14/2002
Sample Time:	1500	Prep. Date:	09/18/2002
Matrix:	WATER	Analysis Date:	09/21/2002
Amount Used:	1000 mL	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4993
% Moisture:	NA	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	0.23	1.0	ND		UG/L	1
Aroclor 1221	0.58	2.0	ND		UG/L	1
Aroclor 1232	0.33	1.0	ND		UG/L	1
Aroclor 1242	0.14	1.0	ND		UG/L	1
Aroclor 1248	0.12	1.0	ND		UG/L	1
Aroclor 1254	0.16	1.0	ND		UG/L	1
Aroclor 1260	0.15	1.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	17-101	33%
Tetrachloro-m-xylene	45-92	55%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 09/30/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	FSS-004-04-ESW	ARDL Lab No.:	301103-02
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0730	Prep. Date:	09/24/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5009
% Moisture:	18.4	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.1	40.4	ND		UG/KG	1
Aroclor 1221	16.5	82.1	ND		UG/KG	1
Aroclor 1232	10.2	40.4	ND		UG/KG	1
Aroclor 1242	11.4	40.4	ND		UG/KG	1
Aroclor 1248	7.6	40.4	ND		UG/KG	1
Aroclor 1254	5.3	40.4	ND		UG/KG	1
Aroclor 1260	6.8	40.4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	90%
Tetrachloro-m-xylene	42-94	86%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 09/30/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	FSS-003-04-ESW	ARDL Lab No.:	301103-03
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0735	Prep. Date:	09/24/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5009
% Moisture:	17.4	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9	40.0	ND		UG/KG	1
Aroclor 1221	16.3	81.1	ND		UG/KG	1
Aroclor 1232	10.1	40.0	ND		UG/KG	1
Aroclor 1242	11.2	40.0	ND		UG/KG	1
Aroclor 1248	7.5	40.0	ND		UG/KG	1
Aroclor 1254	5.2	40.0	ND		UG/KG	1
Aroclor 1260	6.7	40.0	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	89%
Tetrachloro-m-xylene	42-94	77%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 09/30/2002

Project Name:	USACE FT DEARBORN	Analysis:	PCB'S
Project No.:	17297	Analytical Method:	8082
		Prep Method:	3550A

Field ID:	FSS-002-04-ESW	ARDL Lab No.:	301103-04
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0746	Prep. Date:	09/24/2002
Matrix:	SOIL	Analysis Date:	09/24/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5009
% Moisture:	21.2	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.4	41.9	ND		UG/KG	1
Aroclor 1221	17.1	85.0	ND		UG/KG	1
Aroclor 1232	10.6	41.9	ND		UG/KG	1
Aroclor 1242	11.8	41.9	ND		UG/KG	1
Aroclor 1248	7.9	41.9	ND		UG/KG	1
Aroclor 1254	5.5	41.9	ND		UG/KG	1
Aroclor 1260	7	41.9	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	85%
Tetrachloro-m-xylene	42-94	75%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 09/30/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	FSS-001-04-ESW	ARDL Lab No.:	301103-05
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0808	Prep. Date:	09/24/2002
Matrix:	SOIL	Analysis Date:	09/24/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5009
% Moisture:	19.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.3	41.1	ND		UG/KG	1
Aroclor 1221	16.8	83.4	ND		UG/KG	1
Aroclor 1232	10.4	41.1	ND		UG/KG	1
Aroclor 1242	11.6	41.1	ND		UG/KG	1
Aroclor 1248	7.7	41.1	ND		UG/KG	1
Aroclor 1254	5.4	41.1	ND		UG/KG	1
Aroclor 1260	6.9	41.1	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	88%
Tetrachloro-m-xylene	42-94	77%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/01/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	FSS-008-04-ESW	ARDL Lab No.:	301103-06
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0808	Prep. Date:	09/24/2002
Matrix:	SOIL	Analysis Date:	09/24/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5009
% Moisture:	20.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.4	41.5	ND		UG/KG	1
Aroclor 1221	17	84.3	ND		UG/KG	1
Aroclor 1232	10.5	41.5	ND		UG/KG	1
Aroclor 1242	11.7	41.5	ND		UG/KG	1
Aroclor 1248	7.8	41.5	ND		UG/KG	1
Aroclor 1254	5.4	41.5	ND		UG/KG	1
Aroclor 1260	6.9	41.5	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	87%
Tetrachloro-m-xylene	42-94	73%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 09/30/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	VWR-001-03-ESW	ARDL Lab No.:	301103-07
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0934	Prep. Date:	09/24/2002
Matrix:	SOIL	Analysis Date:	09/24/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5009
% Moisture:	18.2	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.1	40.3	ND		UG/KG	1
Aroclor 1221	16.5	81.9	ND		UG/KG	1
Aroclor 1232	10.2	40.3	ND		UG/KG	1
Aroclor 1242	11.4	40.3	ND		UG/KG	1
Aroclor 1248	7.6	40.3	ND		UG/KG	1
Aroclor 1254	5.3	40.3	ND		UG/KG	1
Aroclor 1260	6.7	40.3	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	90%
Tetrachloro-m-xylene	42-94	82%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

PAH-8270 SIM

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/04/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3510B

Field ID:	VWR-002-02-ERB	ARDL Lab No.:	301103-01
Desc/Location:	NONE	Lab Filename:	Z3786
Sample Date:	09/12/2002	Received Date:	09/14/2002
Sample Time:	1500	Prep. Date:	09/18/2002
Matrix:	WATER	Analysis Date:	09/24/2002
Amount Used:	1000 mL	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5014
% Moisture:	NA	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	0.049	1.0	ND		UG/L	1
Acenaphthylene	0.052	1.0	ND		UG/L	1
Acenaphthene	0.059	1.0	ND		UG/L	1
Fluorene	0.051	1.0	ND		UG/L	1
Phenanthrene	0.06	1.0	ND		UG/L	1
Anthracene	0.05	1.0	ND		UG/L	1
Fluoranthene	0.062	1.0	ND		UG/L	1
Pyrene	0.045	1.0	ND		UG/L	1
Benzo(a)anthracene	0.055	1.0	ND		UG/L	1
Chrysene	0.058	1.0	ND		UG/L	1
Benzo(b)fluoranthene	0.068	1.0	ND		UG/L	1
Benzo(k)fluoranthene	0.055	1.0	ND		UG/L	1
Benzo(a)pyrene	0.048	1.0	ND		UG/L	1
Indeno(1,2,3-cd)pyrene	0.05	1.0	ND		UG/L	1
Dibenzo(a,h)anthracene	0.054	1.0	ND		UG/L	1
Benzo(g,h,i)perylene	0.049	1.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	43-116	72%
Nitrobenzene-d5	35-114	63%
Terphenyl-d14	33-141	69%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-004-04-ESW	ARDL Lab No.:	301103-02
Desc/Location:	NONE	Lab Filename:	Z3837
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0730	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5002
% Moisture:	18.4	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.4	12.3	ND		UG/KG	1
Acenaphthylene	2.9	12.3	ND		UG/KG	1
Acenaphthene	3.4	12.3	ND		UG/KG	1
Fluorene	2.9	12.3	4.8	J	UG/KG	1
Phenanthrene	3.1	12.3	30.2		UG/KG	1
Anthracene	2.5	12.3	5.8	J	UG/KG	1
Fluoranthene	3.2	12.3	29.6		UG/KG	1
Pyrene	2.3	12.3	26.3		UG/KG	1
Benzo(a)anthracene	2.4	12.3	9.1	J	UG/KG	1
Chrysene	2.9	12.3	12.6		UG/KG	1
Benzo(b)fluoranthene	2.9	12.3	7.7	J	UG/KG	1
Benzo(k)fluoranthene	4.5	12.3	6.4	J	UG/KG	1
Benzo(a)pyrene	2.7	12.3	6.7	J	UG/KG	1
Indeno(1,2,3-cd)pyrene	2.9	12.3	4.3	J	UG/KG	1
Dibenzo(a,h)anthracene	2.7	12.3	ND		UG/KG	1
Benzo(g,h,i)perylene	2.9	12.3	6.5	J	UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	67%
Nitrobenzene-d5	23-120	63%
Terphenyl-d14	18-137	81%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
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Lab Report No: 301103 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-003-04-ESW	ARDL Lab No.:	301103-03
Desc/Location:	NONE	Lab Filename:	Z3838
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0735	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5002
% Moisture:	17.4	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.4	12.1	34.9		UG/KG	1
Acenaphthylene	2.9	12.1	ND		UG/KG	1
Acenaphthene	3.3	12.1	ND		UG/KG	1
Fluorene	2.8	12.1	5.2	J	UG/KG	1
Phenanthrene	3.1	12.1	15.4		UG/KG	1
Anthracene	2.4	12.1	5.1	J	UG/KG	1
Fluoranthene	3.1	12.1	20.2		UG/KG	1
Pyrene	2.3	12.1	26.8		UG/KG	1
Benzo(a)anthracene	2.4	12.1	11.6	J	UG/KG	1
Chrysene	2.9	12.1	16.1		UG/KG	1
Benzo(b)fluoranthene	2.9	12.1	11.7	J	UG/KG	1
Benzo(k)fluoranthene	4.5	12.1	7.5	J	UG/KG	1
Benzo(a)pyrene	2.7	12.1	10.5	J	UG/KG	1
Indeno(1,2,3-cd)pyrene	2.8	12.1	7.7	J	UG/KG	1
Dibenzo(a,h)anthracene	2.7	12.1	ND		UG/KG	1
Benzo(g,h,i)perylene	2.9	12.1	13.2		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	72%
Nitrobenzene-d5	23-120	67%
Terphenyl-d14	18-137	80%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-002-04-ESW	ARDL Lab No.:	301103-04
Desc/Location:	NONE	Lab Filename:	Z3839
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0746	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5002
% Moisture:	21.2	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.5	12.7	ND		UG/KG	1
Acenaphthylene	3	12.7	ND		UG/KG	1
Acenaphthene	3.5	12.7	ND		UG/KG	1
Fluorene	3	12.7	ND		UG/KG	1
Phenanthrene	3.2	12.7	ND		UG/KG	1
Anthracene	2.5	12.7	ND		UG/KG	1
Fluoranthene	3.3	12.7	ND		UG/KG	1
Pyrene	2.4	12.7	ND		UG/KG	1
Benzo(a)anthracene	2.5	12.7	ND		UG/KG	1
Chrysene	3	12.7	ND		UG/KG	1
Benzo(b)fluoranthene	3	12.7	ND		UG/KG	1
Benzo(k)fluoranthene	4.7	12.7	ND		UG/KG	1
Benzo(a)pyrene	2.8	12.7	ND		UG/KG	1
Indeno(1,2,3-cd)pyrene	3	12.7	ND		UG/KG	1
Dibenzo(a,h)anthracene	2.8	12.7	ND		UG/KG	1
Benzo(g,h,i)perylene	3	12.7	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	62%
Nitrobenzene-d5	23-120	52%
Terphenyl-d14	18-137	81%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
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Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-001-04-ESW	ARDL Lab No.:	301103-05
Desc/Location:	NONE	Lab Filename:	Z3840
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0808	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5002
% Moisture:	19.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.5	12.5	ND		UG/KG	1
Acenaphthylene	3	12.5	ND		UG/KG	1
Acenaphthene	3.4	12.5	ND		UG/KG	1
Fluorene	2.9	12.5	ND		UG/KG	1
Phenanthrene	3.2	12.5	ND		UG/KG	1
Anthracene	2.5	12.5	ND		UG/KG	1
Fluoranthene	3.2	12.5	ND		UG/KG	1
Pyrene	2.3	12.5	ND		UG/KG	1
Benzo(a)anthracene	2.4	12.5	ND		UG/KG	1
Chrysene	2.9	12.5	ND		UG/KG	1
Benzo(b)fluoranthene	3	12.5	ND		UG/KG	1
Benzo(k)fluoranthene	4.6	12.5	ND		UG/KG	1
Benzo(a)pyrene	2.8	12.5	ND		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.9	12.5	ND		UG/KG	1
Dibenzo(a,h)anthracene	2.7	12.5	ND		UG/KG	1
Benzo(g,h,i)perylene	3	12.5	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	33%
Nitrobenzene-d5	23-120	42%
Terphenyl-d14	18-137	81%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
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Lab Report No: 301103 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-008-04-ESW	ARDL Lab No.:	301103-06
Desc/Location:	NONE	Lab Filename:	Z3841
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0808	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5002
% Moisture:	20.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.5	12.6	ND		UG/KG	1
Acenaphthylene	3	12.6	ND		UG/KG	1
Acenaphthene	3.4	12.6	ND		UG/KG	1
Fluorene	3	12.6	ND		UG/KG	1
Phenanthrene	3.2	12.6	ND		UG/KG	1
Anthracene	2.5	12.6	ND		UG/KG	1
Fluoranthene	3.3	12.6	ND		UG/KG	1
Pyrene	2.3	12.6	ND		UG/KG	1
Benzo(a)anthracene	2.5	12.6	ND		UG/KG	1
Chrysene	3	12.6	ND		UG/KG	1
Benzo(b)fluoranthene	3	12.6	ND		UG/KG	1
Benzo(k)fluoranthene	4.6	12.6	ND		UG/KG	1
Benzo(a)pyrene	2.8	12.6	ND		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.9	12.6	ND		UG/KG	1
Dibenzo(a,h)anthracene	2.8	12.6	ND		UG/KG	1
Benzo(g,h,i)perylene	3	12.6	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	50%
Nitrobenzene-d5	23-120	51%
Terphenyl-d14	18-137	80%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/14/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-001-03-ESW	ARDL Lab No.:	301103-07
Desc/Location:	NONE	Lab Filename:	Z3844
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0934	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	09/26/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5002
% Moisture:	18.2	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.4	12.2	ND		UG/KG	1
Acenaphthylene	2.9	12.2	ND		UG/KG	1
Acenaphthene	3.3	12.2	ND		UG/KG	1
Fluorene	2.9	12.2	ND		UG/KG	1
Phenanthrene	3.1	12.2	ND		UG/KG	1
Anthracene	2.4	12.2	ND		UG/KG	1
Fluoranthene	3.2	12.2	8.2	J	UG/KG	1
Pyrene	2.3	12.2	8.8	J	UG/KG	1
Benzo(a)anthracene	2.4	12.2	4.7	J	UG/KG	1
Chrysene	2.9	12.2	5.2	J	UG/KG	1
Benzo(b)fluoranthene	2.9	12.2	ND		UG/KG	1
Benzo(k)fluoranthene	4.5	12.2	ND		UG/KG	1
Benzo(a)pyrene	2.7	12.2	ND		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.9	12.2	ND		UG/KG	1
Dibenzo(a,h)anthracene	2.7	12.2	ND		UG/KG	1
Benzo(g,h,i)perylene	2.9	12.2	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	53%
Nitrobenzene-d5	23-120	50%
Terphenyl-d14	18-137	73%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

8015M

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 09/25/2002

Project Name: USACE FT DEARBORN Analysis: MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.: 17297 Analytical Method: 8015
Prep Method: NONE

Field ID:	VWR-001-03-ESW	ARDL Lab No.:	301103-07
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0934	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/24/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B4999
% Moisture:	18.2	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	2	12.2	ND		MG/KG	1

INORGANICS

INORGANIC ANALYSIS DATA PACKAGE

FERGUSON HARBOR

Report Date: 10/01/02

Delivery Order No.: 17297

ARDL Report No.: 301103

Lab Name: ARDL, Inc.
Samples Received at ARDL: 14-Sep-02
Project Name: USACE Ft. Dearborn

CASE NARRATIVE

Sample ID No.	Date Collected	Lab ID No.	Analysis Requested
FSS-004-04-ESW	09/13/02	301103-02	Total Metals(1), Total Solids
FSS-003-04-ESW	09/13/02	301103-03	Total Metals(1), Total Solids
FSS-002-04-ESW	09/13/02	301103-04	Total Metals(1), Total Solids
FSS-001-04-ESW	09/13/02	301103-05	Total Metals(1), Total Solids
FSS-008-04-ESW	09/13/02	301103-06	Total Metals(1), Total Solids
VWR-001-03-ESW	09/13/02	301103-07	Total Metals(1), Total Solids

(1) Including aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, nickel, potassium, selenium, silver, sodium, thallium, vanadium and zinc.

The quality control data are summarized as follows:

LABORATORY CONTROL SAMPLES
Percent recovery of all LCS analyses were within control limits.

PREPARATION BLANKS
Results of all preparation blanks were within acceptable limits.

MATRIX SPIKES
Percent recovery of all matrix spikes and matrix spike duplicates except 1 of 2 for zinc and 2 of 2 for antimony were within control limits. Sample results for aluminum, iron and manganese were greater than 4 times the spike amount; therefore, percent recovery was not considered.

DUPLICATES
RPD on all duplicate analyses were within control limits.
All duplicate analyses are reported as MS/MSD except calcium, magnesium, potassium, sodium and total solids which are reported as sample/duplicate.

Release of the data contained in this package has been authorized by the Technical Services Manager or his designee as verified by the following signature.

Daniel J. Gillespie
Technical Services Manager

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/01/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: FSS-004-04-ESW ARDL No: 301103-02
Sampling Loc'n: NONE Received: 09/14/2002
Sampling Date: 09/13/2002 Matrix: SOIL
Sampling Time: 0730 Moisture: 18.4

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.3	10300	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Antimony	0.61	1.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Arsenic	0.37	7.4	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Barium	1.2	85.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Beryllium	0.12	0.6	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cadmium	0.49	0.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Calcium	12.3	14600	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Chromium	0.61	13.8	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cobalt	0.61	9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Copper	1.2	23.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Iron	6.1	17000	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Lead	0.37	102	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Magnesium	12.3	9630	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Manganese	0.61	338	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Mercury	0.098	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1639
Nickel	1.8	18.6	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Potassium	245	1250	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Selenium	0.61	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Silver	0.61	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Sodium	49	132	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Thallium	0.37	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Vanadium	0.61	20.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Zinc	0.61	51.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Solids, Percent	1	81.6	%	NONE	160.3	NA	09/16/02	09179443

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/01/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: FSS-003-04-ESW ARDL No: 301103-03
Sampling Loc'n: NONE Received: 09/14/2002
Sampling Date: 09/13/2002 Matrix: SOIL
Sampling Time: 0735 Moisture: 17.4

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.1	8100	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Antimony	0.61	1.1	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Arsenic	0.36	9.2	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Barium	1.2	56.1	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Beryllium	0.12	0.47	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cadmium	0.48	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Calcium	12.1	25000	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Chromium	0.61	12.2	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cobalt	0.61	8.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Copper	1.2	25.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Iron	6.1	17000	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Lead	0.36	21.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Magnesium	12.1	16700	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Manganese	0.61	396	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Mercury	0.097	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1639
Nickel	1.8	17.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Potassium	242	1360	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Selenium	0.61	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Silver	0.61	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Sodium	48.4	89.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Thallium	0.36	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Vanadium	0.61	16.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Zinc	0.61	56.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Solids, Percent	1	82.6	%	NONE	160.3	NA	09/16/02	09179443

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/01/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: FSS-002-04-ESW ARDL No: 301103-04
Sampling Loc'n: NONE Received: 09/14/2002
Sampling Date: 09/13/2002 Matrix: SOIL
Sampling Time: 0746 Moisture: 21.2

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.7	14400	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Antimony	0.63	1.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Arsenic	0.38	10.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Barium	1.3	93.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Beryllium	0.13	0.81	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cadmium	0.51	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Calcium	12.7	7930	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Chromium	0.63	21.2	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cobalt	0.63	13.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Copper	1.3	34.4	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Iron	6.3	26100	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Lead	0.38	16.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Magnesium	12.7	8290	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Manganese	0.63	541	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Mercury	0.1	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1639
Nickel	1.9	36.0	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Potassium	254	1620	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Selenium	0.63	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Silver	0.63	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Sodium	50.8	90.1	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Thallium	0.38	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Vanadium	0.63	26.1	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Zinc	0.63	53.8	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Solids, Percent	1	78.8	%	NONE	160.3	NA	09/16/02	09179443

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/01/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: FSS-001-04-ESW ARDL No: 301103-05
Sampling Loc'n: NONE Received: 09/14/2002
Sampling Date: 09/13/2002 Matrix: SOIL
Sampling Time: 0808 Moisture: 19.7

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.5	14800	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Antimony	0.62	1.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Arsenic	0.37	11.6	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Barium	1.2	94.2	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Beryllium	0.12	0.86	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cadmium	0.5	0.62	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Calcium	12.5	3030	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Chromium	0.62	20.6	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cobalt	0.62	12.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Copper	1.2	31.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Iron	6.2	26300	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Lead	0.37	18.6	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Magnesium	12.5	4770	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Manganese	0.62	651	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Mercury	0.1	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1639
Nickel	1.9	32.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Potassium	249	1590	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Selenium	0.62	0.94	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Silver	0.62	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Sodium	49.8	81.8	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Thallium	0.37	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Vanadium	0.62	27.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Zinc	0.62	54.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Solids, Percent	1	80.3	%	NONE	160.3	NA	09/16/02	09179443

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/01/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: FSS-008-04-ESW ARDL No: 301103-06
Sampling Loc'n: NONE Received: 09/14/2002
Sampling Date: 09/13/2002 Matrix: SOIL
Sampling Time: 0808 Moisture: 20.5

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.6	14800	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Antimony	0.63	1.1	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Arsenic	0.38	12.0	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Barium	1.3	95.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Beryllium	0.13	0.86	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cadmium	0.5	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Calcium	12.6	3080	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Chromium	0.63	20.6	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cobalt	0.63	12.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Copper	1.3	32.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Iron	6.3	26800	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Lead	0.38	16.6	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Magnesium	12.6	4820	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Manganese	0.63	701	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Mercury	0.1	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1639
Nickel	1.9	31.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Potassium	252	1520	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Selenium	0.63	0.79	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Silver	0.63	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Sodium	50.3	77.4	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Thallium	0.38	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Vanadium	0.63	26.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Zinc	0.63	56.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Solids, Percent	1	79.5	%	NONE	160.3	NA	09/16/02	09179443

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/01/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: VWR-001-03-ESW ARDL No: 301103-07
Sampling Loc'n: NONE Received: 09/14/2002
Sampling Date: 09/13/2002 Matrix: SOIL
Sampling Time: 0934 Moisture: 18.2

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.2	11800	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Antimony	0.61	1	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Arsenic	0.37	8.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Barium	1.2	109	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Beryllium	0.12	0.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cadmium	0.49	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Calcium	12.2	2850	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Chromium	0.61	14.6	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cobalt	0.61	10.4	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Copper	1.2	16.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Iron	6.1	19300	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Lead	0.37	16.4	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Magnesium	12.2	2740	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Manganese	0.61	680	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Mercury	0.098	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1639
Nickel	1.8	13.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Potassium	244	889	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Selenium	0.61	1	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Silver	0.61	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Sodium	48.9	62.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Thallium	0.37	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Vanadium	0.61	27.1	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Zinc	0.61	41.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Solids, Percent	1	81.8	%	NONE	160.3	NA	09/16/02	09179443

ORGANIC ANALYSIS DATA PACKAGE

Contract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301104 Samples Received at ARDL: 9/18/02

CASE NARRATIVE

VOLATILE FRACTION - METHOD 8260

Soil samples were received by ARDL, Inc. on September 18, 2002, for VOA analysis for GC/MS. All analyses were performed within the method specified holding time.

No unusual problems were encountered during the sample analyses.

SEMIVOLATILE FRACTION -METHOD 8270

Soil samples were received by ARDL, Inc. on September 18, 2002, for BNA analysis by GC/MS. All analyses were performed according to low level protocol within method specified holding times.

No unusual problems were encountered during the sample extraction or sample analyses.

PNA-SIM FRACTION

Soil samples were received by ARDL, Inc. on September 18, 2002, for PNA-SIM analysis by GC/MS. All analyses were performed according to low level protocol within method specified holding times.

No unusual problems were encountered during the sample extraction or sample analyses.

GLYCOL FRACTION - METHOD 8015M

Soil samples were received by ARDL, Inc. on September 18, 2002,for Glycol analysis. The samples were extracted within the method specified holding time.

No additional problems were encountered during the analysis of these samples.

PCB FRACTION - METHOD 8082

Soil samples were received by ARDL, Inc. on September 18, 2002, for PCB analysis. The samples were extracted within holding time requirements.

The samples were cleaned up by acid hydrolysis.

ORGANIC ANALYSIS DATA PACKAGE

Contract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301104 Samples Received at ARDL: 9/18/02

CASE NARRATIVE (Continued)

PCB FRACTION - METHOD 8082 (Continued)

These samples were extracted in the same batch as ARDL SDG 301103. Therefore, only one blank and spike blank were prepared. Due to software limitations, the blank and spike blank are designated as ARDL SDG 301103, although they are also applicable to ARDL SDG 301104. Additionally, the MS/MSD evaluation was performed on samples from ARDL SDG 301103. Refer to that data package for these results.

The columns used for PCB analysis are as follows: Primary column - RTX-CLP PESTICIDE II, 30 meter, 0.32 mm ID, 0.25 mm df; Confirmation column - RTX-CLP PESTICIDES, 30 meter, 0.32 mm ID, 0.50 mm df.

The following pages list manual intergrations performed on the data. (See hard copy for explanation of manual integrations):

Pages: 60147-60150
60153-60158
60163-60166
60272-60275

No additional problems were encountered in the analysis of these samples.

ORGANIC DATA REPORTING QUALIFIERS

The following organic data reporting qualifiers are used as required.

ND- Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the N code is not used.

- This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns.

ORGANIC ANALYSIS DATA PACKAGE

Contract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301104 Samples Received at ARDL: 9/18/02

CASE NARRATIVE (Continued)

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, do not apply this flag; instead use a laboratory-defined flag.

B - This flag is used when the analyte is found in the blank as well as the sample. It indicates possible/probable blank contamination and warns

the data user to take appropriate action. This flag must by used for a TIC as well as for a positively identified target compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. If one or more compounds have a response greater than full scale, except as noted in Exhibit D, the sample or extract must be diluted and re-analyzed according to the specifications in Exhibit D. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form 1 for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate copies of Form 1. The Form 1 for the diluted sample shall have the "DL" suffix appended to the sample number.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form 1 for the diluted sample, and all concentration values reported on that Form 1 are flagged with the "D" flag.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized for the Laboratory Manager or his designee, as verified by the following signature.

Daniel J. Gillespie
Technical Services Manager

VOA-8260B

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-005-08-EBT	ARDL Lab No.:	301104-01
Desc/Location:	NONE	Lab Filename:	T7063
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1334	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/08/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	16.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	137	395	ND		UG/KG	1
bis(2-Chloroethyl)ether	28.9	395	ND		UG/KG	1
2-Chlorophenol	126	395	ND		UG/KG	1
1,3-Dichlorobenzene	64	395	ND		UG/KG	1
1,4-Dichlorobenzene	51	395	ND		UG/KG	1
1,2-Dichlorobenzene	58.1	395	ND		UG/KG	1
2-Methylphenol	112	395	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	22.9	395	ND		UG/KG	1
4-Methylphenol	143	395	ND		UG/KG	1
N-Nitroso-di-n-propylamine	27.1	395	ND		UG/KG	1
Hexachloroethane	59	395	ND		UG/KG	1
Nitrobenzene	76	395	ND		UG/KG	1
Isophorone	60.9	395	ND		UG/KG	1
2-Nitrophenol	125	395	ND		UG/KG	1
2,4-Dimethylphenol	139	395	ND		UG/KG	1
bis(2-Chloroethoxy)methane	30.6	395	ND		UG/KG	1
2,4-Dichlorophenol	148	395	ND		UG/KG	1
1,2,4-Trichlorobenzene	62.5	395	ND		UG/KG	1
Naphthalene	16.8	395	ND		UG/KG	1
4-Chloroaniline	93.1	395	ND		UG/KG	1
Hexachlorobutadiene	71.3	395	ND		UG/KG	1
4-Chloro-3-methylphenol	121	395	ND		UG/KG	1
2-Methylnaphthalene	76.2	395	ND		UG/KG	1
Hexachlorocyclopentadiene	61.7	395	ND		UG/KG	1
2,4,6-Trichlorophenol	130	395	ND		UG/KG	1
2,4,5-Trichlorophenol	137	395	ND		UG/KG	1
2-Chloronaphthalene	59.9	395	ND		UG/KG	1
2-Nitroaniline	62.9	395	ND		UG/KG	1
Dimethylphthalate	25.4	395	ND		UG/KG	1
2,6-Dinitrotoluene	51.9	395	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-005-08-EBT	ARDL Lab No.:	301104-01 (cont'd)
Desc/Location:	NONE	Lab Filename:	T7063
Sample Date:	09/12/2002	Received Date:	09/18/2002
Sample Time:	1334	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/08/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	16.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	45.7	395	ND		UG/KG	1
2,4-Dinitrophenol	122	395	ND		UG/KG	1
4-Nitrophenol	108	395	ND		UG/KG	1
Dibenzofuran	80.1	395	ND		UG/KG	1
2,4-Dinitrotoluene	58.8	395	ND		UG/KG	1
Diethylphthalate	17.2	395	ND		UG/KG	1
4-Chlorophenyl-phenylether	25.7	395	ND		UG/KG	1
4-Nitroaniline	47.9	395	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	107	395	ND		UG/KG	1
N-Nitrosodiphenylamine	24.8	395	ND		UG/KG	1
4-Bromophenyl-phenylether	29.3	395	ND		UG/KG	1
Hexachlorobenzene	49.7	395	ND		UG/KG	1
Pentachlorophenol	99.2	395	ND		UG/KG	1
Di-n-butylphthalate	31.6	395	ND		UG/KG	1
Butylbenzylphthalate	24.3	395	ND		UG/KG	1
3,3'-Dichlorobenzidine	163	395	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	26.3	395	ND		UG/KG	1
Di-n-octylphthalate	52.7	395	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	48%
Phenol-d5	24-113	63%
Nitrobenzene-d5	23-120	48%
2-Fluorobiphenyl	30-115	73%
2,4,6-Tribromophenol	19-122	107%
Terphenyl-d14	18-137	65%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-006-08-EBT	ARDL Lab No.:	301104-02
Desc/Location:	NONE	Lab Filename:	T7064
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1320	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/08/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	11.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	129	374	ND		UG/KG	1
bis(2-Chloroethyl)ether	27.3	374	ND		UG/KG	1
2-Chlorophenol	119	374	ND		UG/KG	1
1,3-Dichlorobenzene	60.5	374	ND		UG/KG	1
1,4-Dichlorobenzene	48.2	374	ND		UG/KG	1
1,2-Dichlorobenzene	54.9	374	ND		UG/KG	1
2-Methylphenol	106	374	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	21.6	374	ND		UG/KG	1
4-Methylphenol	135	374	ND		UG/KG	1
N-Nitroso-di-n-propylamine	25.6	374	ND		UG/KG	1
Hexachloroethane	55.8	374	ND		UG/KG	1
Nitrobenzene	70.1	374	ND		UG/KG	1
Isophorone	56.2	374	ND		UG/KG	1
2-Nitrophenol	116	374	ND		UG/KG	1
2,4-Dimethylphenol	128	374	ND		UG/KG	1
bis(2-Chloroethoxy)methane	28.2	374	ND		UG/KG	1
2,4-Dichlorophenol	137	374	ND		UG/KG	1
1,2,4-Trichlorobenzene	57.6	374	ND		UG/KG	1
Naphthalene	15.5	374	ND		UG/KG	1
4-Chloroaniline	86	374	ND		UG/KG	1
Hexachlorobutadiene	65.8	374	ND		UG/KG	1
4-Chloro-3-methylphenol	112	374	ND		UG/KG	1
2-Methylnaphthalene	70.3	374	ND		UG/KG	1
Hexachlorocyclopentadiene	57	374	ND		UG/KG	1
2,4,6-Trichlorophenol	120	374	ND		UG/KG	1
2,4,5-Trichlorophenol	127	374	ND		UG/KG	1
2-Chloronaphthalene	55.3	374	ND		UG/KG	1
2-Nitroaniline	58.1	374	ND		UG/KG	1
Dimethylphthalate	23.4	374	ND		UG/KG	1
2,6-Dinitrotoluene	47.9	374	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-006-08-EBT	ARDL Lab No.:	301104-02 (cont'd)
Desc/Location:	NONE	Lab Filename:	T7064
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1320	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/08/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	11.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	43.3	374	ND		UG/KG	1
2,4-Dinitrophenol	116	374	ND		UG/KG	1
4-Nitrophenol	102	374	ND		UG/KG	1
Dibenzofuran	75.8	374	ND		UG/KG	1
2,4-Dinitrotoluene	55.6	374	ND		UG/KG	1
Diethylphthalate	16.3	374	ND		UG/KG	1
4-Chlorophenyl-phenylether	24.3	374	ND		UG/KG	1
4-Nitroaniline	45.3	374	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	101	374	ND		UG/KG	1
N-Nitrosodiphenylamine	23.4	374	ND		UG/KG	1
4-Bromophenyl-phenylether	27.7	374	ND		UG/KG	1
Hexachlorobenzene	47	374	ND		UG/KG	1
Pentachlorophenol	93.8	374	ND		UG/KG	1
Di-n-butylphthalate	29.9	374	ND		UG/KG	1
Butylbenzylphthalate	23	374	ND		UG/KG	1
3,3'-Dichlorobenzidine	154	374	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	24.9	374	ND		UG/KG	1
Di-n-octylphthalate	49.8	374	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	58%
Phenol-d5	24-113	65%
Nitrobenzene-d5	23-120	57%
2-Fluorobiphenyl	30-115	72%
2,4,6-Tribromophenol	19-122	104%
Terphenyl-d14	18-137	61%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/17/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-001-05-ESW	ARDL Lab No.:	301104-03
Desc/Location:	NONE	Lab Filename:	T7114
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1505	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	20.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	144	416	ND		UG/KG	1
bis(2-Chloroethyl)ether	30.4	416	ND		UG/KG	1
2-Chlorophenol	132	416	ND		UG/KG	1
1,3-Dichlorobenzene	67.3	416	ND		UG/KG	1
1,4-Dichlorobenzene	53.7	416	ND		UG/KG	1
1,2-Dichlorobenzene	61.2	416	ND		UG/KG	1
2-Methylphenol	118	416	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	24.1	416	ND		UG/KG	1
4-Methylphenol	150	416	ND		UG/KG	1
N-Nitroso-di-n-propylamine	28.5	416	ND		UG/KG	1
Hexachloroethane	62.2	416	ND		UG/KG	1
Nitrobenzene	78.1	416	ND		UG/KG	1
Isophorone	62.5	416	ND		UG/KG	1
2-Nitrophenol	129	416	ND		UG/KG	1
2,4-Dimethylphenol	142	416	ND		UG/KG	1
bis(2-Chloroethoxy)methane	31.4	416	ND		UG/KG	1
2,4-Dichlorophenol	153	416	ND		UG/KG	1
1,2,4-Trichlorobenzene	64.2	416	ND		UG/KG	1
Naphthalene	17.3	416	ND		UG/KG	1
4-Chloroaniline	95.7	416	ND		UG/KG	1
Hexachlorobutadiene	73.3	416	ND		UG/KG	1
4-Chloro-3-methylphenol	124	416	ND		UG/KG	1
2-Methylnaphthalene	78.3	416	ND		UG/KG	1
Hexachlorocyclopentadiene	63.4	416	ND		UG/KG	1
2,4,6-Trichlorophenol	134	416	ND		UG/KG	1
2,4,5-Trichlorophenol	141	416	ND		UG/KG	1
2-Chloronaphthalene	61.5	416	ND		UG/KG	1
2-Nitroaniline	64.7	416	ND		UG/KG	1
Dimethylphthalate	26.1	416	ND		UG/KG	1
2,6-Dinitrotoluene	53.3	416	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/17/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-001-05-ESW	ARDL Lab No.:	301104-03 (cont'd)
Desc/Location:	NONE	Lab Filename:	T7114
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1505	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	20.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	48.2	416	ND		UG/KG	1
2,4-Dinitrophenol	129	416	ND		UG/KG	1
4-Nitrophenol	113	416	ND		UG/KG	1
Dibenzofuran	84.4	416	ND		UG/KG	1
2,4-Dinitrotoluene	61.9	416	ND		UG/KG	1
Diethylphthalate	18.2	416	ND		UG/KG	1
4-Chlorophenyl-phenylether	27.1	416	ND		UG/KG	1
4-Nitroaniline	50.4	416	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	112	416	ND		UG/KG	1
N-Nitrosodiphenylamine	26.1	416	ND		UG/KG	1
4-Bromophenyl-phenylether	30.9	416	ND		UG/KG	1
Hexachlorobenzene	52.3	416	ND		UG/KG	1
Pentachlorophenol	104	416	ND		UG/KG	1
Di-n-butylphthalate	33.3	416	ND		UG/KG	1
Butylbenzylphthalate	25.6	416	ND		UG/KG	1
3,3'-Dichlorobenzidine	172	416	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	27.7	416	ND		UG/KG	1
Di-n-octylphthalate	55.5	416	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	67%
Phenol-d5	24-113	74%
Nitrobenzene-d5	23-120	58%
2-Fluorobiphenyl	30-115	73%
2,4,6-Tribromophenol	19-122	80%
Terphenyl-d14	18-137	74%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-002-05-ESW	ARDL Lab No.:	301104-04
Desc/Location:	NONE	Lab Filename:	T7115
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1522	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	20.1	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	143	413	ND		UG/KG	1
bis(2-Chloroethyl)ether	30.2	413	ND		UG/KG	1
2-Chlorophenol	131	413	ND		UG/KG	1
1,3-Dichlorobenzene	66.8	413	ND		UG/KG	1
1,4-Dichlorobenzene	53.3	413	ND		UG/KG	1
1,2-Dichlorobenzene	60.7	413	ND		UG/KG	1
2-Methylphenol	117	413	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	23.9	413	ND		UG/KG	1
4-Methylphenol	149	413	ND		UG/KG	1
N-Nitroso-di-n-propylamine	28.3	413	ND		UG/KG	1
Hexachloroethane	61.7	413	ND		UG/KG	1
Nitrobenzene	77.5	413	ND		UG/KG	1
Isophorone	62.1	413	ND		UG/KG	1
2-Nitrophenol	128	413	ND		UG/KG	1
2,4-Dimethylphenol	141	413	ND		UG/KG	1
bis(2-Chloroethoxy)methane	31.2	413	ND		UG/KG	1
2,4-Dichlorophenol	151	413	ND		UG/KG	1
1,2,4-Trichlorobenzene	63.7	413	ND		UG/KG	1
Naphthalene	17.1	413	ND		UG/KG	1
4-Chloroaniline	95	413	ND		UG/KG	1
Hexachlorobutadiene	72.7	413	ND		UG/KG	1
4-Chloro-3-methylphenol	123	413	ND		UG/KG	1
2-Methylnaphthalene	77.7	413	ND		UG/KG	1
Hexachlorocyclopentadiene	63	413	ND		UG/KG	1
2,4,6-Trichlorophenol	133	413	ND		UG/KG	1
2,4,5-Trichlorophenol	140	413	ND		UG/KG	1
2-Chloronaphthalene	61.1	413	ND		UG/KG	1
2-Nitroaniline	64.2	413	ND		UG/KG	1
Dimethylphthalate	25.9	413	ND		UG/KG	1
2,6-Dinitrotoluene	52.9	413	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-002-05-ESW	ARDL Lab No.:	301104-04 (cont'd)
Desc/Location:	NONE	Lab Filename:	T7115
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1522	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	20.1	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	47.8	413	ND		UG/KG	1
2,4-Dinitrophenol	128	413	ND		UG/KG	1
4-Nitrophenol	112	413	ND		UG/KG	1
Dibenzofuran	83.7	413	ND		UG/KG	1
2,4-Dinitrotoluene	61.5	413	ND		UG/KG	1
Diethylphthalate	18	413	ND		UG/KG	1
4-Chlorophenyl-phenylether	26.9	413	ND		UG/KG	1
4-Nitroaniline	50.1	413	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	112	413	ND		UG/KG	1
N-Nitrosodiphenylamine	25.9	413	ND		UG/KG	1
4-Bromophenyl-phenylether	30.7	413	ND		UG/KG	1
Hexachlorobenzene	51.9	413	ND		UG/KG	1
Pentachlorophenol	104	413	ND		UG/KG	1
Di-n-butylphthalate	33	413	ND		UG/KG	1
Butylbenzylphthalate	25.4	413	ND		UG/KG	1
3,3'-Dichlorobenzidine	170	413	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	27.5	413	ND		UG/KG	1
Di-n-octylphthalate	55.1	413	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	63%
Phenol-d5	24-113	71%
Nitrobenzene-d5	23-120	55%
2-Fluorobiphenyl	30-115	70%
2,4,6-Tribromophenol	19-122	80%
Terphenyl-d14	18-137	69%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-003-04-ESW	ARDL Lab No.:	301104-05
Desc/Location:	NONE	Lab Filename:	T7116
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1545	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	12.6	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	143	378	ND		UG/KG	1
bis(2-Chloroethyl)ether	27.6	378	ND		UG/KG	1
2-Chlorophenol	120	378	ND		UG/KG	1
1,3-Dichlorobenzene	61.1	378	ND		UG/KG	1
1,4-Dichlorobenzene	48.7	378	ND		UG/KG	1
1,2-Dichlorobenzene	55.5	378	ND		UG/KG	1
2-Methylphenol	107	378	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	21.9	378	ND		UG/KG	1
4-Methylphenol	136	378	ND		UG/KG	1
N-Nitroso-di-n-propylamine	25.9	378	ND		UG/KG	1
Hexachloroethane	56.4	378	ND		UG/KG	1
Nitrobenzene	70.8	378	ND		UG/KG	1
Isophorone	56.8	378	ND		UG/KG	1
2-Nitrophenol	117	378	ND		UG/KG	1
2,4-Dimethylphenol	129	378	ND		UG/KG	1
bis(2-Chloroethoxy)methane	28.5	378	ND		UG/KG	1
2,4-Dichlorophenol	138	378	ND		UG/KG	1
1,2,4-Trichlorobenzene	58.2	378	ND		UG/KG	1
Naphthalene	15.7	378	ND		UG/KG	1
4-Chloroaniline	86.8	378	ND		UG/KG	1
Hexachlorobutadiene	66.5	378	ND		UG/KG	1
4-Chloro-3-methylphenol	113	378	ND		UG/KG	1
2-Methylnaphthalene	71.1	378	ND		UG/KG	1
Hexachlorocyclopentadiene	57.6	378	ND		UG/KG	1
2,4,6-Trichlorophenol	121	378	ND		UG/KG	1
2,4,5-Trichlorophenol	128	378	ND		UG/KG	1
2-Chloronaphthalene	55.8	378	ND		UG/KG	1
2-Nitroaniline	58.7	378	ND		UG/KG	1
Dimethylphthalate	23.7	378	ND		UG/KG	1
2,6-Dinitrotoluene	48.4	378	ND		UG/KG	1

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Lab Report No: 301104 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-003-04-ESW	ARDL Lab No.:	301104-05 (cont'd)
Desc/Location:	NONE	Lab Filename:	T7116
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1545	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	12.6	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	43.7	378	ND		UG/KG	1
2,4-Dinitrophenol	117	378	ND		UG/KG	1
4-Nitrophenol	103	378	ND		UG/KG	1
Dibenzofuran	76.5	378	ND		UG/KG	1
2,4-Dinitrotoluene	56.2	378	ND		UG/KG	1
Diethylphthalate	16.5	378	ND		UG/KG	1
4-Chlorophenyl-phenylether	24.6	378	ND		UG/KG	1
4-Nitroaniline	45.8	378	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	102	378	ND		UG/KG	1
N-Nitrosodiphenylamine	23.7	378	ND		UG/KG	1
4-Bromophenyl-phenylether	28	378	ND		UG/KG	1
Hexachlorobenzene	47.5	378	ND		UG/KG	1
Pentachlorophenol	94.7	378	ND		UG/KG	1
Di-n-butylphthalate	30.2	378	ND		UG/KG	1
Butylbenzylphthalate	23.2	378	ND		UG/KG	1
3,3'-Dichlorobenzidine	156	378	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	25.2	378	ND		UG/KG	1
Di-n-octylphthalate	50.3	378	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	43%
Phenol-d5	24-113	50%
Nitrobenzene-d5	23-120	36%
2-Fluorobiphenyl	30-115	54%
2,4,6-Tribromophenol	19-122	78%
Terphenyl-d14	18-137	70%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Lab Report No: 301104 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-004-05-ESW	ARDL Lab No.:	301104-06
Desc/Location:	NONE	Lab Filename:	T7117
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1530	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	18.1	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	139	403	ND		UG/KG	1
bis(2-Chloroethyl)ether	29.4	403	ND		UG/KG	1
2-Chlorophenol	128	403	ND		UG/KG	1
1,3-Dichlorobenzene	65.2	403	ND		UG/KG	1
1,4-Dichlorobenzene	52	403	ND		UG/KG	1
1,2-Dichlorobenzene	59.2	403	ND		UG/KG	1
2-Methylphenol	115	403	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	23.3	403	ND		UG/KG	1
4-Methylphenol	145	403	ND		UG/KG	1
N-Nitroso-di-n-propylamine	27.6	403	ND		UG/KG	1
Hexachloroethane	60.2	403	ND		UG/KG	1
Nitrobenzene	75.6	403	ND		UG/KG	1
Isophorone	60.6	403	ND		UG/KG	1
2-Nitrophenol	125	403	ND		UG/KG	1
2,4-Dimethylphenol	138	403	ND		UG/KG	1
bis(2-Chloroethoxy)methane	30.4	403	ND		UG/KG	1
2,4-Dichlorophenol	148	403	ND		UG/KG	1
1,2,4-Trichlorobenzene	62.1	403	ND		UG/KG	1
Naphthalene	16.7	403	ND		UG/KG	1
4-Chloroaniline	92.7	403	ND		UG/KG	1
Hexachlorobutadiene	70.9	403	ND		UG/KG	1
4-Chloro-3-methylphenol	120	403	ND		UG/KG	1
2-Methylnaphthalene	75.8	403	ND		UG/KG	1
Hexachlorocyclopentadiene	61.4	403	ND		UG/KG	1
2,4,6-Trichlorophenol	129	403	ND		UG/KG	1
2,4,5-Trichlorophenol	137	403	ND		UG/KG	1
2-Chloronaphthalene	59.6	403	ND		UG/KG	1
2-Nitroaniline	62.6	403	ND		UG/KG	1
Dimethylphthalate	25.3	403	ND		UG/KG	1
2,6-Dinitrotoluene	51.6	403	ND		UG/KG	1

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Lab Report No: 301104 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-004-05-ESW	ARDL Lab No.:	301104-06 (cont'd)
Desc/Location:	NONE	Lab Filename:	T7117
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1530	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	18.1	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	46.6	403	ND		UG/KG	1
2,4-Dinitrophenol	125	403	ND		UG/KG	1
4-Nitrophenol	110	403	ND		UG/KG	1
Dibenzofuran	81.7	403	ND		UG/KG	1
2,4-Dinitrotoluene	60	403	ND		UG/KG	1
Diethylphthalate	17.6	403	ND		UG/KG	1
4-Chlorophenyl-phenylether	26.3	403	ND		UG/KG	1
4-Nitroaniline	48.8	403	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	109	403	ND		UG/KG	1
N-Nitrosodiphenylamine	25.3	403	ND		UG/KG	1
4-Bromophenyl-phenylether	29.9	403	ND		UG/KG	1
Hexachlorobenzene	50.7	403	ND		UG/KG	1
Pentachlorophenol	101	403	ND		UG/KG	1
Di-n-butylphthalate	32.2	403	ND		UG/KG	1
Butylbenzylphthalate	24.8	403	ND		UG/KG	1
3,3'-Dichlorobenzidine	166	403	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	26.9	403	ND		UG/KG	1
Di-n-octylphthalate	53.7	403	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	53%
Phenol-d5	24-113	63%
Nitrobenzene-d5	23-120	48%
2-Fluorobiphenyl	30-115	66%
2,4,6-Tribromophenol	19-122	86%
Terphenyl-d14	18-137	73%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

BNA-8270

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Lab Report No: 301104 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17207 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	OWS-005-08-EBT	ARDL Lab No.:	301104-01
Desc/Location:	NONE	Lab Filename:	Y2644
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1334	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/18/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSR
% Moisture:	16.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	12.0	ND		UG/KG	1
Vinyl Chloride	2.2	12.0	ND		UG/KG	1
Bromomethane	1.6	12.0	ND		UG/KG	1
Chloroethane	1.9	12.0	ND		UG/KG	1
1,1-Dichloroethene	0.99	6	ND		UG/KG	1
Methylene Chloride	2.9	6	ND		UG/KG	1
trans-1,2-Dichloroethene	0.95	6	ND		UG/KG	1
1,1-Dichloroethane	0.28	6	ND		UG/KG	1
Carbon disulfide	[illegible]	6	ND		UG/KG	1
cis-1,2-Dichloroethene	[illegible]	[illegible]	ND		UG/KG	1
Bromochloromethane	0.97	6	ND		UG/KG	1
Chloroform	0.81	6	ND		UG/KG	1
1,1,1-Trichloroethane	0.37	6	ND		UG/KG	1
Carbon Tetrachloride	0.73	6	ND		UG/KG	1
Benzene	0.68	6	ND		UG/KG	1
1,2-Dichloroethane	0.44	6	ND		UG/KG	1
Trichloroethene	1	6	ND		UG/KG	1
1,2-Dichloropropane	0.41	6	ND		UG/KG	1
Bromodichloromethane	0.28	6	ND		UG/KG	1
cis-1,3-Dichloropropene	0.78	6	ND		UG/KG	1
Toluene	0.37	6	ND		UG/KG	1
trans-1,3-Dichloropropene	0.74	6	ND		UG/KG	1
1,1,2-Trichloroethane	0.31	6	ND		UG/KG	1
Tetrachloroethene	0.56	6	ND		UG/KG	1
Dibromochloromethane	0.28	6	ND		UG/KG	1
Chlorobenzene	0.25	6	ND		UG/KG	1
Ethyl Benzene	0.43	6	ND		UG/KG	1
m & p-Xylene	0.96	6	ND		UG/KG	1
o-Xylene	1	6	ND		UG/KG	1
Styrene	0.42	6	ND		UG/KG	1

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Lab Report No: 301104 **Report Date:** 09/24/2002

Project Name:	USACE FT DEARBORN	Analysis:	VOLATILES, GC/MS (8260)
Project No.:	17207	Analytical Method:	8260B
		Prep Method:	5030A

Field ID:	OWS-005-08-EBT	ARDL Lab No.:	301104-01 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2644
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1334	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/18/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0920JFSR
% Moisture:	16.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.26	6	ND		UG/KG	1
2-Hexanone	21.6	24.0	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	6	ND		UG/KG	1
Acetone	38.3	59.9	ND		UG/KG	1
2-Butanone	20.4	59.9	ND		UG/KG	1
4-Methyl-2-pentanone	1[illegible]	24.0	ND		UG/KG	1

[illegible]	[illegible]	[illegible]
[illegible]		
1,2-Dichloroethane-d4	7[illegible]-1[illegible]5	1[illegible]
Toluene-d8	86-129	113%
4-Bromofluorobenzene	76-141	109%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Lab Report No: 301104 **Report Date:** 09/24/2002

Project Name: USACE FT DEARBORN **Analysis:** VOLATILES, GC/MS (8260)
Project No.: 17297 **Analytical Method:** 8260B
Prep Method: 5030A

Field ID:	OWS-005-08-EBT	ARDL Lab No.:	301104-01MS
Desc/Location:	NONE	Lab Filename:	Y2650
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1334	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/18/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSR
% Moisture:	16.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	12.0	ND		UG/KG	1
Vinyl Chloride	2.2	12.0	ND		UG/KG	1
Bromomethane	1.6	12.0	ND		UG/KG	1
Chloroethane	1.9	12.0	ND		UG/KG	1
1,1-Dichloroethene	0.99	6.0	44.6		UG/KG	1
Methylene Chloride	2.9	6.0	4.6	J	UG/KG	1
trans-1,2-Dichloroethene	0.95	6.0	ND		UG/KG	1
1,1-Dichloroethane	0.28	6.0	ND		UG/KG	1
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
cis-1,2-Dichloroethene	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
Bromochloromethane	0.37	6.0	ND		UG/KG	1
Chloroform	0.81	6.0	ND		UG/KG	1
1,1,1-Trichloroethane	0.37	6.0	ND		UG/KG	1
Carbon Tetrachloride	0.73	6.0	ND		UG/KG	1
Benzene	0.68	6.0	55.8		UG/KG	1
1,2-Dichloroethane	0.44	6.0	ND		UG/KG	1
Trichloroethene	1	6.0	46.3		UG/KG	1
1,2-Dichloropropane	0.41	6.0	ND		UG/KG	1
Bromodichloromethane	0.28	6.0	ND		UG/KG	1
cis-1,3-Dichloropropene	0.78	6.0	ND		UG/KG	1
Toluene	0.37	6.0	55.5		UG/KG	1
trans-1,3-Dichloropropene	0.74	6.0	ND		UG/KG	1
1,1,2-Trichloroethane	0.31	6.0	ND		UG/KG	1
Tetrachloroethene	0.56	6.0	ND		UG/KG	1
Dibromochloromethane	0.28	6.0	ND		UG/KG	1
Chlorobenzene	0.25	6.0	51.9		UG/KG	1
Ethyl Benzene	0.43	6.0	ND		UG/KG	1
m & p-Xylene	0.96	6.0	ND		UG/KG	1
o-Xylene	1	6.0	ND		UG/KG	1
Styrene	0.42	6.0	ND		UG/KG	1

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Lab Report No: 301104 **Report Date:** 09/24/2002

Project Name:	USACE FT DEARBORN	**Analysis:**	VOLATILES, GC/MS (8260)
Project No.:	17297	**Analytical Method:**	8260B
		Prep Method:	5030A

Field ID:	OWS-005-08-EBT	**ARDL Lab No.:**	301104-01MS (cont'd)
Desc/Location:	NONE	**Lab Filename:**	Y2650
Sample Date:	09/17/2002	**Received Date:**	09/18/2002
Sample Time:	1334	**Prep. Date:**	09/18/2002
Matrix:	SOIL	**Analysis Date:**	09/18/2002
Amount Used:	5 g	**Instrument ID:**	HP1
Final Volume:	5 mL	**QC Batch:**	0924JFSR
% Moisture:	16.5	**Level:**	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.26	6.0	ND		UG/KG	1
2-Hexanone	21.6	24.0	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	6.0	ND		UG/KG	1
[illegible]	33.3	59.9			UG/KG	1
2-Butanone	20.4	59.9	ND		UG/KG	1
4-Methyl-2-pentanone	13.0	24.0	ND		UG/KG	1

[illegible] RECOVERIES	[illegible]	[illegible]
1,2-Dichloroethane-d4	70-125	9[illegible]
Toluene-d8	86-129	89%
4-Bromofluorobenzene	76-141	87%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Lab Report No: 301104 **Report Date:** 09/24/2002

Project Name: USACE FT DEARBORN **Analysis:** VOLATILES, GC/MS (8260)
Project No.: 17297 **Analytical Method:** 8260B
Prep Method: 5030A

Field ID:	OWS-005-08-EBT	ARDL Lab No.:	301104-01MD
Desc/Location:	NONE	Lab Filename:	Y2651
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1334	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/18/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSR
% Moisture:	16.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	12.0	ND		UG/KG	1
Vinyl Chloride	2.2	12.0	ND		UG/KG	1
Bromomethane	1.6	12.0	ND		UG/KG	1
Chloroethane	1.9	12.0	ND		UG/KG	1
1,1-Dichloroethene	0.99	6.0	52.7		UG/KG	1
Methylene Chloride	2.3	6.0	4.3	J	UG/KG	1
trans-1,2-Dichloroethene	0.95	6.0	ND		UG/KG	1
1,1-Dichloroethane	0.28	6.0	ND		UG/KG	1
Carbon disulfide	1	6.0	ND		UG/KG	1
[illegible]	[illegible]	[illegible]	ND		[illegible]	[illegible]
Bromochloromethane	0.97	6.0	ND		UG/KG	1
Chloroform	0.81	6.0	ND		UG/KG	1
1,1,1-Trichloroethane	0.37	6.0	ND		UG/KG	1
Carbon Tetrachloride	0.73	6.0	ND		UG/KG	1
Benzene	0.68	6.0	66.9		UG/KG	1
1,2-Dichloroethane	0.44	6.0	ND		UG/KG	1
Trichloroethene	1	6.0	58.2		UG/KG	1
1,2-Dichloropropane	0.41	6.0	ND		UG/KG	1
Bromodichloromethane	0.28	6.0	ND		UG/KG	1
cis-1,3-Dichloropropene	0.78	6.0	ND		UG/KG	1
Toluene	0.37	6.0	66.2		UG/KG	1
trans-1,3-Dichloropropene	0.74	6.0	ND		UG/KG	1
1,1,2-Trichloroethane	0.31	6.0	ND		UG/KG	1
Tetrachloroethene	0.56	6.0	ND		UG/KG	1
Dibromochloromethane	0.28	6.0	ND		UG/KG	1
Chlorobenzene	0.25	6.0	63.8		UG/KG	1
Ethyl Benzene	0.43	6.0	ND		UG/KG	1
m & p-Xylene	0.96	6.0	ND		UG/KG	1
o-Xylene	1	6.0	ND		UG/KG	1
Styrene	0.42	6.0	ND		UG/KG	1

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Lab Report No: 301104 **Report Date:** 09/24/2002

Project Name:	USACE FT DEARBORN	**Analysis:**	VOLATILES, GC/MS (8260)
Project No.:	17297	**Analytical Method:**	8260B
		Prep Method:	5030A

Field ID:	OWS-005-08-EBT	**ARDL Lab No.:**	301104-01MD (cont'd)
Desc/Location:	NONE	**Lab Filename:**	Y2651
Sample Date:	09/17/2002	**Received Date:**	09/18/2002
Sample Time:	1334	**Prep. Date:**	09/18/2002
Matrix:	SOIL	**Analysis Date:**	09/18/2002
Amount Used:	5 g	**Instrument ID:**	HP1
Final Volume:	5 mL	**QC Batch:**	0924JFSR
% Moisture:	16.5	**Level:**	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.26	6.0	ND		UG/KG	1
2-Hexanone	21.6	24.0	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.9	6.0	ND		UG/KG	1
Acetone	38.3	59.9	ND		UG/KG	1
2-Butanone	20.4	59.9	ND		UG/KG	1
4-Methyl-2-pentanone	11.8	24.0	ND		UG/KG	1

SURROGATE RECOVERIES:	[illegible]	[illegible]
[illegible] Fluoromethane	[illegible]	[illegible]
1,2-Dichloroethane-d4	78-135	110%
Toluene-d8	86-129	110%
4-Bromofluorobenzene	**76-141**	**115%**

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 **Report Date:** 09/24/2002

Project Name: USACE FT DEARBORN **Analysis:** VOLATILES, GC/MS (8260)
Project No.: 17207 **Analytical Method:** 8260B
Prep Method: 5030A

Field ID:	OWS-006-08-EBT	ARDL Lab No.:	301104-02
Desc/Location:	NONE	Lab Filename:	Y2645
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1320	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/18/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSR
% Moisture:	11.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.2	11.3	ND		UG/KG	1
Vinyl Chloride	2	11.3	ND		UG/KG	1
Bromomethane	1.5	11.3	ND		UG/KG	1
Chloroethane	1.8	11.3	ND		UG/KG	1
1,1-Dichloroethene	0.94	5.7	ND		UG/KG	1
Methylene Chloride	2.7	5.7	4.[illegible]	J	UG/KG	1
trans-1,2-Dichloroethene	0.89	5.7	ND		UG/KG	1
1,1-Dichloroethane	[illegible]	5.7	ND		UG/KG	1
Carbon disulfide	[illegible]	5.7	ND		UG/KG	1
cis-1,2-Dichloroethene	[illegible]	5.7	ND		UG/KG	1
Bromochloromethane	0.92	5.7	ND		UG/KG	1
Chloroform	0.77	5.7	ND		UG/KG	1
1,1,1-Trichloroethane	0.35	5.7	ND		UG/KG	1
Carbon Tetrachloride	0.69	5.7	ND		UG/KG	1
Benzene	0.65	5.7	ND		UG/KG	1
1,2-Dichloroethane	0.42	5.7	ND		UG/KG	1
Trichloroethene	0.99	5.7	ND		UG/KG	1
1,2-Dichloropropane	0.39	5.7	ND		UG/KG	1
Bromodichloromethane	0.26	5.7	ND		UG/KG	1
cis-1,3-Dichloropropene	0.74	5.7	ND		UG/KG	1
Toluene	0.35	5.7	ND		UG/KG	1
trans-1,3-Dichloropropene	0.7	5.7	ND		UG/KG	1
1,1,2-Trichloroethane	0.29	5.7	ND		UG/KG	1
Tetrachloroethene	0.53	5.7	ND		UG/KG	1
Dibromochloromethane	0.26	5.7	ND		UG/KG	1
Chlorobenzene	0.24	5.7	ND		UG/KG	1
Ethyl Benzene	0.41	5.7	ND		UG/KG	1
m & p-Xylene	0.91	5.7	ND		UG/KG	1
o-Xylene	0.97	5.7	ND		UG/KG	1
Styrene	0.4	5.7	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 **Report Date:** 09/24/2002

Project Name: USACE FT DEARBORN	**Analysis:** VOLATILES, GC/MS (8260)
Project No.: 17207	**Analytical Method:** 8260B
	Prep Method: 5030A

Field ID:	OWS-006-08-EBT	ARDL Lab No.:	301104-02 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2645
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1320	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/18/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSR
% Moisture:	11.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.25	5.7	ND		UG/KG	1
2-Hexanone	20.4	22.7	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.7	5.7	ND		UG/KG	1
[illegible]	30.2	[illegible]			U	
2-[illegible]	19.3	54.6	[illegible]		U	[illegible]
4-[illegible]-2-pentanone	17	22.7	[illegible]		U	[illegible]

Dibromofluoromethane	[illegible]	[illegible]
1,2-Dichloroethane-d4	78-135	102%
Toluene-d8	86-129	111%
4-Bromofluorobenzene	76-141	125%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 **Report Date:** 09/24/2002

Project Name:	USACE FT DEARBORN	Analysis:	VOLATILES, GC/MS (8260)
Project No.:	17207	Analytical Method:	8260B
		Prep Method:	5030A

Field ID:	OWS-001-05-ESW	ARDL Lab No.:	301104-03
Desc/Location:	NONE	Lab Filename:	Y2646
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1505	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/18/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSR
% Moisture:	20.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.4	12.6	ND		UG/KG	1
Vinyl Chloride	2.3	12.6	ND		UG/KG	1
Bromomethane	1.6	12.6	ND		UG/KG	1
Chloroethane	2	12.6	ND		UG/KG	1
1,1-Dichloroethene	1	6.3	ND		UG/KG	1
Methylene Chloride	3	6.3	5.2	J	UG/KG	1
trans-1,2-Dichloroethene	2	6.3	ND		UG/KG	1
1,1-Dichloroethane	2.1	6.3	ND		UG/KG	1
Carbon disulfide	1.1	6.3	1		UG/KG	1
cis-1,2-Dichloroethene	0.42	6.3	ND		UG/KG	1
Bromochloromethane	1	6.3	ND		UG/KG	1
Chloroform	0.86	6.3	ND		UG/KG	1
1,1,1-Trichloroethane	0.39	6.3	ND		UG/KG	1
Carbon Tetrachloride	0.77	6.3	ND		UG/KG	1
Benzene	0.72	6.3	ND		UG/KG	1
1,2-Dichloroethane	0.47	6.3	ND		UG/KG	1
Trichloroethene	1.1	6.3	ND		UG/KG	1
1,2-Dichloropropane	0.43	6.3	ND		UG/KG	1
Bromodichloromethane	0.29	6.3	ND		UG/KG	1
cis-1,3-Dichloropropene	0.82	6.3	ND		UG/KG	1
Toluene	0.39	6.3	0.52	J	UG/KG	1
trans-1,3-Dichloropropene	0.78	6.3	ND		UG/KG	1
1,1,2-Trichloroethane	0.33	6.3	ND		UG/KG	1
Tetrachloroethene	0.59	6.3	ND		UG/KG	1
Dibromochloromethane	0.29	6.3	ND		UG/KG	1
Chlorobenzene	0.26	6.3	ND		UG/KG	1
Ethyl Benzene	0.45	6.3	ND		UG/KG	1
m & p-Xylene	1	6.3	ND		UG/KG	1
o-Xylene	1.1	6.3	ND		UG/KG	1
Styrene	0.44	6.3	ND		UG/KG	1

ARDL, INC.
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Mt. Vernon, Illinois 62864

Lab Report No: 301104 **Report Date:** 09/24/2002

Project Name:	USACE FT DEARBORN	**Analysis:**	VOLATILES, GC/MS (8260)
Project No.:	17207	**Analytical Method:**	8260B
		Prep Method:	5030A

Field ID:	OWS-001-05-ESW	ARDL Lab No.:	301104-03 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2646
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1505	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/18/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSR
% Moisture:	20.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.28	6.3	ND		UG/KG	1
2-Hexanone	22.7	25.2	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.9	6.3	ND		UG/KG	1
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]

Dibromofluoromethane	[illegible]	[illegible]
1,2-Dichloroethane-d4	78-125	100%
Toluene-d8	86-129	98%
4-Bromofluorobenzene	76-141	97%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 **Report Date:** 09/24/2002

Project Name:	USACE FT DEARBORN	Analysis:	VOLATILES, GC/MS (8260)
Project No.:	17207	Analytical Method:	8260B
		Prep Method:	5030A

Field ID:	OWS-002-05-ESW	ARDL Lab No.:	301104-04
Desc/Location:	NONE	Lab Filename:	Y2647
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1522	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/18/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSR
% Moisture:	20.1	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.4	12.5	ND		UG/KG	1
Vinyl Chloride	2.3	12.5	ND		UG/KG	1
Bromomethane	1.6	12.5	ND		UG/KG	1
Chloroethane	2	12.5	ND		UG/KG	1
1,1-Dichloroethene	1	6.3	ND		UG/KG	1
Methylene Chloride	3	6.3	ND		UG/KG	1
trans-1,2-Dichloroethene	0.99	6.3	ND		UG/KG	1
1,1-Dichloroethane	0.29	6.3	ND		UG/KG	1
Carbon disulfide	[illegible]	6.3	ND		UG/KG	1
cis-1,2-Dichloroethene	[illegible]	6.3	ND		UG/KG	1
Bromochloromethane	1	6.3	ND		UG/KG	1
Chloroform	0.85	6.3	ND		UG/KG	1
1,1,1-Trichloroethane	0.39	6.3	ND		UG/KG	1
Carbon Tetrachloride	0.76	6.3	ND		UG/KG	1
Benzene	0.71	6.3	ND		UG/KG	1
1,2-Dichloroethane	0.46	6.3	ND		UG/KG	1
Trichloroethene	1.1	6.3	ND		UG/KG	1
1,2-Dichloropropane	0.43	6.3	ND		UG/KG	1
Bromodichloromethane	0.29	6.3	ND		UG/KG	1
cis-1,3-Dichloropropene	0.81	6.3	ND		UG/KG	1
Toluene	0.39	6.3	ND		UG/KG	1
trans-1,3-Dichloropropene	0.78	6.3	ND		UG/KG	1
1,1,2-Trichloroethane	0.33	6.3	ND		UG/KG	1
Tetrachloroethene	0.59	6.3	ND		UG/KG	1
Dibromochloromethane	0.29	6.3	ND		UG/KG	1
Chlorobenzene	0.26	6.3	ND		UG/KG	1
Ethyl Benzene	0.45	6.3	ND		UG/KG	1
m & p-Xylene	1	6.3	ND		UG/KG	1
o-Xylene	1.1	6.3	ND		UG/KG	1
Styrene	0.44	6.3	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 **Report Date:** 09/24/2002

Project Name:	USACE FT DEARBORN	**Analysis:**	VOLATILES, GC/MS (8260)
Project No.:	17207	**Analytical Method:**	8260B
		Prep Method:	5030A

Field ID:	OWS-002-05-ESW	**ARDL Lab No.:**	301104-04 (cont'd)
Desc/Location:	NONE	**Lab Filename:**	Y2647
Sample Date:	09/17/2002	**Received Date:**	09/18/2002
Sample Time:	1522	**Prep. Date:**	09/18/2002
Matrix:	SOIL	**Analysis Date:**	09/18/2002
Amount Used:	5 g	**Instrument ID:**	HP1
Final Volume:	5 mL	**QC Batch:**	0924JFSR
% Moisture:	20.1	**Level:**	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.28	6.3	ND		UG/KG	1
2-Hexanone	22.5	25.0	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.9	6.3	ND		UG/KG	1
Ace[illegible]	40.1	[illegible]	[illegible]		U[illegible]	[illegible]
2-[illegible]	[illegible]	[illegible]	[illegible]		U[illegible]	[illegible]
4-[illegible]1-2-pentanone	[illegible]	[illegible]	[illegible]		UG/KG	[illegible]

[illegible]		
[illegible]		
1,2-Dichloroethane-d4	78-135	9[illegible]
Toluene-d8	86-129	98%
4-Bromofluorobenzene	76-141	99%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 **Report Date:** 09/24/2002

Project Name:	USACE FT DEARBORN	Analysis:	VOLATILES, GC/MS (8260)
Project No.:	17207	Analytical Method:	8260B
		Prep Method:	5030A

Field ID:	OWS-003-04-ESW	ARDL Lab No.:	301104-05
Desc/Location:	NONE	Lab Filename:	Y2648
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1545	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/18/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSR
% Moisture:	12.6	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.2	11.4	ND		UG/KG	1
Vinyl Chloride	2.1	11.4	ND		UG/KG	1
Bromomethane	1.5	11.4	ND		UG/KG	1
Chloroethane	1.8	11.4	ND		UG/KG	1
1,1-Dichloroethene	[illegible]	5.7	[illegible]		UG/KG	1
Methylene Chloride	2.7	5.7	5.6	J	UG/KG	1
trans-1,2-Dichloroethene	0.9	5.7	ND		UG/KG	1
1,1-Dichloroethane	0.26	5.7	ND		UG/KG	1
Carbon disulfide	0.99	5.7	ND		UG/KG	1
cis-1,2-Dichloroethene	[illegible]	[illegible]	[illegible]		UG/KG	[illegible]
Bromochloromethane	0.93	5.7	ND		UG/KG	1
Chloroform	0.78	5.7	ND		UG/KG	1
1,1,1-Trichloroethane	0.35	5.7	ND		UG/KG	1
Carbon Tetrachloride	0.7	5.7	ND		UG/KG	1
Benzene	0.65	5.7	ND		UG/KG	1
1,2-Dichloroethane	0.42	5.7	ND		UG/KG	1
Trichloroethene	1	5.7	ND		UG/KG	1
1,2-Dichloropropane	0.39	5.7	ND		UG/KG	1
Bromodichloromethane	0.26	5.7	ND		UG/KG	1
cis-1,3-Dichloropropene	0.74	5.7	ND		UG/KG	1
Toluene	0.35	5.7	ND		UG/KG	1
trans-1,3-Dichloropropene	0.71	5.7	ND		UG/KG	1
1,1,2-Trichloroethane	0.3	5.7	ND		UG/KG	1
Tetrachloroethene	0.54	5.7	ND		UG/KG	1
Dibromochloromethane	0.26	5.7	ND		UG/KG	1
Chlorobenzene	0.24	5.7	ND		UG/KG	1
Ethyl Benzene	0.41	5.7	ND		UG/KG	1
m & p-Xylene	0.92	5.7	ND		UG/KG	1
o-Xylene	0.98	5.7	ND		UG/KG	1
Styrene	0.4	5.7	ND		UG/KG	1

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Rt. 15E, Mt. Vernon Airport Industrial Park
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Lab Report No: 301104 **Report Date: 09/24/2002**

Project Name:	**USACE FT DEARBORN**	**Analysis:**	**VOLATILES, GC/MS (8260)**
Project No.:	**17207**	**Analytical Method:**	**8260B**
		Prep Method:	**5030A**

Field ID:	OWS-003-04-ESW	ARDL Lab No.:	301104-05 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2548
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1545	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/18/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSR
% Moisture:	12.6	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.25	5.7	ND		UG/KG	1
2-Hexanone	20.6	22.9	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.7	5.7	ND		UG/KG	1
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]

SURROGATE RECOVERIES:	Limits	%
1,2-Dichloroethane-d4	70-125	9[illegible]
Toluene-d8	**86-129**	**103%**
4-Bromofluorobenzene	**76-141**	**105%**

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 **Report Date:** 09/24/2002

Project Name:	USACE FT DEARBORN	Analysis:	VOLATILES, GC/MS (8260)
Project No.:	17207	Analytical Method:	8260B
		Prep Method:	5030A

Field ID:	OWS-004-05-ESW	ARDL Lab No.:	301104-06
Desc/Location:	NONE	Lab Filename:	Y2649
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1530	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/18/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSR
% Moisture:	18.1	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	12.2	ND		UG/KG	1
Vinyl Chloride	2.2	12.2	ND		UG/KG	1
Bromomethane	1.6	12.2	ND		UG/KG	1
Chloroethane	2	12.2	ND		UG/KG	1
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
[illegible]						
1,1-Dichloroethane	[illegible]	6.1	[illegible]		[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
[illegible] 1,2-Dichloroethene	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
Bromochloromethane	0.99	6.1	ND		UG/KG	1
Chloroform	0.83	6.1	ND		UG/KG	1
1,1,1-Trichloroethane	0.38	6.1	ND		UG/KG	1
Carbon Tetrachloride	0.74	6.1	ND		UG/KG	1
Benzene	0.7	6.1	ND		UG/KG	1
1,2-Dichloroethane	0.45	6.1	ND		UG/KG	1
Trichloroethene	1.1	6.1	ND		UG/KG	1
1,2-Dichloropropane	0.42	6.1	ND		UG/KG	1
Bromodichloromethane	0.28	6.1	ND		UG/KG	1
cis-1,3-Dichloropropene	0.79	6.1	ND		UG/KG	1
Toluene	0.38	6.1	ND		UG/KG	1
trans-1,3-Dichloropropene	0.76	6.1	ND		UG/KG	1
1,1,2-Trichloroethane	0.32	6.1	ND		UG/KG	1
Tetrachloroethene	0.57	6.1	ND		UG/KG	1
Dibromochloromethane	0.28	6.1	ND		UG/KG	1
Chlorobenzene	0.26	6.1	ND		UG/KG	1
Ethyl Benzene	0.44	6.1	ND		UG/KG	1
m & p-Xylene	0.98	6.1	ND		UG/KG	1
o-Xylene	1.1	6.1	ND		UG/KG	1
Styrene	0.43	6.1	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 **Report Date:** 09/24/2002

Project Name:	USACE FT DEARBORN	**Analysis:**	VOLATILES, GC/MS (8260)
Project No.:	17207	**Analytical Method:**	8260B
		Prep Method:	5030A

Field ID:	OWS-004-05-ESW	ARDL Lab No.:	301104-06	(cont'd)
Desc/Location:	NONE	Lab Filename:	Y2649	
Sample Date:	09/17/2002	Received Date:	09/18/2002	
Sample Time:	1530	Prep. Date:	09/18/2002	
Matrix:	SOIL	Analysis Date:	09/18/2002	
Amount Used:	5 g	Instrument ID:	HP1	
Final Volume:	5 mL	QC Batch:	0924JFSR	
% Moisture:	18.1	Level:	LOW	

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.27	6.1	ND		UG/KG	1
2-Hexanone	22	24.4	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	6.1	ND		UG/KG	1
Acetone	39.1	61.1	ND		UG/KG	1
[illegible]	[illegible]	[illegible]			[illegible]	

[illegible]	[illegible]	[illegible]
1,2-Dichloroethane-d4	78-135	91%
Toluene-d8	86-129	92%
4-Bromofluorobenzene	76-141	103%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

PCB's-8082

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 09/30/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17207 Analytical Method: 8082
Prep Method: 3550A

Field ID:	OWS-005-08-EBT	ARDL Lab No.:	301104-01
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1334	Prep. Date:	09/24/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5009
% Moisture:	16.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	8.9	39.5	ND		UG/KG	1
Aroclor 1221	16.2	80.2	ND		UG/KG	1
Aroclor 1232	10	39.5	ND		UG/KG	1
Aroclor 1242	11.1	39.5	ND		UG/KG	1
Aroclor 1248	7.4	39.5	ND		UG/KG	1
Aroclor 1254	5.2	39.5	ND		UG/KG	1
Aroclor 1260	6.6	39.5	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	82%
Tetrachloro-m-xylene	42-94	76%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 09/30/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17207 Analytical Method: 8082
Prep Method: 3550A

Field ID:	OWS-006-08-EBT	ARDL Lab No.:	301104-02
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1320	Prep. Date:	09/24/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5009
% Moisture:	11.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	8.4	37.4	ND		UG/KG	1
Aroclor 1221	15.3	75.9	ND		UG/KG	1
Aroclor 1232	9.4	37.4	ND		UG/KG	1
Aroclor 1242	10.5	37.4	ND		UG/KG	1
Aroclor 1248	7	37.4	ND		UG/KG	1
Aroclor 1254	4.9	37.4	ND		UG/KG	1
Aroclor 1260	6.3	37.4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	92%
Tetrachloro-m-xylene	42-94	85%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 09/30/2002

Project Name:	USACE FT DEARBORN	Analysis:	PCB'S
Project No.:	17207	Analytical Method:	8082
		Prep Method:	3550A

Field ID:	OWS-001-05-ESW	ARDL Lab No.:	301104-03
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1505	Prep. Date:	09/24/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5009
% Moisture:	20.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.4	41.6	ND		UG/KG	1
Aroclor 1221	17	84.5	ND		UG/KG	1
Aroclor 1232	10.5	41.6	ND		UG/KG	1
Aroclor 1242	11.7	41.6	ND		UG/KG	1
Aroclor 1248	7.8	41.6	ND		UG/KG	1
Aroclor 1254	5.4	41.6	ND		UG/KG	1
Aroclor 1260	7	41.6	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	87%
Tetrachloro-m-xylene	42-94	85%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 09/30/2002

Project Name:	USACE FT DEARBORN	Analysis:	PCB'S
Project No.:	17207	Analytical Method:	8082
		Prep Method:	3550A

Field ID:	OWS-002-05-ESW	ARDL Lab No.:	301104-04
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1522	Prep. Date:	09/24/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5009
% Moisture:	20.1	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.3	41.3	ND		UG/KG	1
Aroclor 1221	16.9	83.9	ND		UG/KG	1
Aroclor 1232	10.4	41.3	ND		UG/KG	1
Aroclor 1242	11.6	41.3	ND		UG/KG	1
Aroclor 1248	7.8	41.3	ND		UG/KG	1
Aroclor 1254	5.4	41.3	ND		UG/KG	1
Aroclor 1260	6.9	41.3	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	83%
Tetrachloro-m-xylene	42-94	77%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 09/30/2002

Project Name:	USACE FT DEARBORN	Analysis:	PCB'S
Project No.:	17207	Analytical Method:	8082
		Prep Method:	3550A

Field ID:	OWS-003-04-ESW	ARDL Lab No.:	301104-05
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1545	Prep. Date:	09/24/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5009
% Moisture:	12.6	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	8.5	37.8	ND		UG/KG	1
Aroclor 1221	15.4	76.7	ND		UG/KG	1
Aroclor 1232	9.5	37.8	ND		UG/KG	1
Aroclor 1242	10.6	37.8	ND		UG/KG	1
Aroclor 1248	7.1	37.8	ND		UG/KG	1
Aroclor 1254	4.9	37.8	ND		UG/KG	1
Aroclor 1260	6.3	37.8	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	93%
Tetrachloro-m-xylene	42-94	85%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 09/30/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17207 Analytical Method: 8082
Prep Method: 3550A

Field ID:	OWS-004-05-ESW	ARDL Lab No.:	301104-06
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1530	Prep. Date:	09/24/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5009
% Moisture:	18.1	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.1	40.3	ND		UG/KG	1
Aroclor 1221	16.5	81.8	ND		UG/KG	1
Aroclor 1232	10.2	40.3	ND		UG/KG	1
Aroclor 1242	11.3	40.3	ND		UG/KG	1
Aroclor 1248	7.6	40.3	ND		UG/KG	1
Aroclor 1254	5.3	40.3	ND		UG/KG	1
Aroclor 1260	6.7	40.3	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	86%
Tetrachloro-m-xylene	42-94	79%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

PAH-8270 SIM

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-005-08-EBT	ARDL Lab No.:	301104-01
Desc/Location:	NONE	Lab Filename:	Z3845
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1334	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	09/26/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5002
% Moisture:	16.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.4	12.0	ND		UG/KG	1
Acenaphthylene	2.8	12.0	ND		UG/KG	1
Acenaphthene	3.3	12.0	ND		UG/KG	1
Fluorene	2.8	12.0	ND		UG/KG	1
Phenanthrene	3	12.0	ND		UG/KG	1
Anthracene	2.4	12.0	ND		UG/KG	1
Fluoranthene	3.1	12.0	ND		UG/KG	1
Pyrene	2.2	12.0	5.6	J	UG/KG	1
Benzo(a)anthracene	2.3	12.0	ND		UG/KG	1
Chrysene	2.8	12.0	12.2		UG/KG	1
Benzo(b)fluoranthene	2.8	12.0	ND		UG/KG	1
Benzo(k)fluoranthene	4.4	12.0	ND		UG/KG	1
Benzo(a)pyrene	2.7	12.0	ND		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.8	12.0	ND		UG/KG	1
Dibenzo(a,h)anthracene	2.6	12.0	ND		UG/KG	1
Benzo(g,h,i)perylene	2.9	12.0	6.6	J	UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	55%
Nitrobenzene-d5	23-120	55%
Terphenyl-d14	18-137	56%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/17/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-006-08-EBT	ARDL Lab No.:	301104-02
Desc/Location:	NONE	Lab Filename:	Z3846
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1320	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	09/26/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5002
% Moisture:	11.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.2	11.3	ND		UG/KG	1
Acenaphthylene	2.7	11.3	ND		UG/KG	1
Acenaphthene	3.1	11.3	ND		UG/KG	1
Fluorene	2.7	11.3	ND		UG/KG	1
Phenanthrene	2.9	11.3	ND		UG/KG	1
Anthracene	2.3	11.3	ND		UG/KG	1
Fluoranthene	2.9	11.3	ND		UG/KG	1
Pyrene	2.1	11.3	5.2	J	UG/KG	1
Benzo(a)anthracene	2.2	11.3	12.1		UG/KG	1
Chrysene	2.7	11.3	13.4		UG/KG	1
Benzo(b)fluoranthene	2.7	11.3	ND		UG/KG	1
Benzo(k)fluoranthene	4.2	11.3	ND		UG/KG	1
Benzo(a)pyrene	2.5	11.3	ND		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.7	11.3	ND		UG/KG	1
Dibenzo(a,h)anthracene	2.5	11.3	ND		UG/KG	1
Benzo(g,h,i)perylene	2.7	11.3	8.7	J	UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	66%
Nitrobenzene-d5	23-120	54%
Terphenyl-d14	18-137	77%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-001-05-ESW	ARDL Lab No.:	301104-03
Desc/Location:	NONE	Lab Filename:	Z3847
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1505	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	09/26/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5002
% Moisture:	20.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.5	12.6	ND		UG/KG	1
Acenaphthylene	3	12.6	ND		UG/KG	1
Acenaphthene	3.5	12.6	ND		UG/KG	1
Fluorene	3	12.6	4.4	J	UG/KG	1
Phenanthrene	3.2	12.6	67.7		UG/KG	1
Anthracene	2.5	12.6	10.4	J	UG/KG	1
Fluoranthene	3.3	12.6	152		UG/KG	1
Pyrene	2.3	12.6	136		UG/KG	1
Benzo(a)anthracene	2.5	12.6	64.7		UG/KG	1
Chrysene	3	12.6	84.2		UG/KG	1
Benzo(b)fluoranthene	3	12.6	70.0		UG/KG	1
Benzo(k)fluoranthene	4.7	12.6	60.2		UG/KG	1
Benzo(a)pyrene	2.8	12.6	69.6		UG/KG	1
Indeno(1,2,3-cd)pyrene	3	12.6	46.4		UG/KG	1
Dibenzo(a,h)anthracene	2.8	12.6	ND		UG/KG	1
Benzo(g,h,i)perylene	3	12.6	49.1		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	55%
Nitrobenzene-d5	23-120	54%
Terphenyl-d14	18-137	77%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/17/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-002-05-ESW	ARDL Lab No.:	301104-04
Desc/Location:	NONE	Lab Filename:	Z3848
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1522	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	09/26/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5002
% Moisture:	20.1	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.5	12.5	ND		UG/KG	1
Acenaphthylene	3	12.5	ND		UG/KG	1
Acenaphthene	3.4	12.5	ND		UG/KG	1
Fluorene	2.9	12.5	ND		UG/KG	1
Phenanthrene	3.2	12.5	20.3		UG/KG	1
Anthracene	2.5	12.5	ND		UG/KG	1
Fluoranthene	3.2	12.5	46.1		UG/KG	1
Pyrene	2.3	12.5	44.4		UG/KG	1
Benzo(a)anthracene	2.5	12.5	21.6		UG/KG	1
Chrysene	3	12.5	27.8		UG/KG	1
Benzo(b)fluoranthene	3	12.5	20.8		UG/KG	1
Benzo(k)fluoranthene	4.6	12.5	24.3		UG/KG	1
Benzo(a)pyrene	2.8	12.5	22.9		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.9	12.5	15.6		UG/KG	1
Dibenzo(a,h)anthracene	2.8	12.5	ND		UG/KG	1
Benzo(g,h,i)perylene	3	12.5	16.9		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	45%
Nitrobenzene-d5	23-120	44%
Terphenyl-d14	18-137	72%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/17/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-003-04-ESW	ARDL Lab No.:	301104-05
Desc/Location:	NONE	Lab Filename:	Z3849
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1545	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	09/26/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5002
% Moisture:	12.6	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.3	11.4	ND		UG/KG	1
Acenaphthylene	2.7	11.4	ND		UG/KG	1
Acenaphthene	3.1	11.4	ND		UG/KG	1
Fluorene	2.7	11.4	ND		UG/KG	1
Phenanthrene	2.9	11.4	ND		UG/KG	1
Anthracene	2.3	11.4	ND		UG/KG	1
Fluoranthene	3	11.4	ND		UG/KG	1
Pyrene	2.1	11.4	ND		UG/KG	1
Benzo(a)anthracene	2.2	11.4	ND		UG/KG	1
Chrysene	2.7	11.4	ND		UG/KG	1
Benzo(b)fluoranthene	2.7	11.4	ND		UG/KG	1
Benzo(k)fluoranthene	4.2	11.4	ND		UG/KG	1
Benzo(a)pyrene	2.6	11.4	ND		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.7	11.4	ND		UG/KG	1
Dibenzo(a,h)anthracene	2.5	11.4	ND		UG/KG	1
Benzo(g,h,i)perylene	2.7	11.4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	66%
Nitrobenzene-d5	23-120	57%
Terphenyl-d14	18-137	82%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-004-05-ESW	ARDL Lab No.:	301104-06
Desc/Location:	NONE	Lab Filename:	Z3850
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1530	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	09/26/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5002
% Moisture:	18.1	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.4	12.2	ND		UG/KG	1
Acenaphthylene	2.9	12.2	ND		UG/KG	1
Acenaphthene	3.3	12.2	ND		UG/KG	1
Fluorene	2.9	12.2	ND		UG/KG	1
Phenanthrene	3.1	12.2	ND		UG/KG	1
Anthracene	2.4	12.2	ND		UG/KG	1
Fluoranthene	3.2	12.2	ND		UG/KG	1
Pyrene	2.3	12.2	ND		UG/KG	1
Benzo(a)anthracene	2.4	12.2	ND		UG/KG	1
Chrysene	2.9	12.2	ND		UG/KG	1
Benzo(b)fluoranthene	2.9	12.2	ND		UG/KG	1
Benzo(k)fluoranthene	4.5	12.2	ND		UG/KG	1
Benzo(a)pyrene	2.7	12.2	ND		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.9	12.2	ND		UG/KG	1
Dibenzo(a,h)anthracene	2.7	12.2	ND		UG/KG	1
Benzo(g,h,i)perylene	2.9	12.2	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	51%
Nitrobenzene-d5	23-120	45%
Terphenyl-d14	18-137	61%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

GLYCOL-8015

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/04/2002

Project Name:	USACE FT DEARBORN	Analysis:	MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.:	17207	Analytical Method:	8015
		Prep Method:	NONE

Field ID:	OWS-005-08-EBT	ARDL Lab No.:	301104-01
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1334	Prep. Date:	09/27/2002
Matrix:	SOIL	Analysis Date:	10/02/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B5012
% Moisture:	16.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	1.9	12.0	ND		MG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/04/2002

Project Name:	USACE FT DEARBORN	Analysis:	MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.:	17207	Analytical Method:	8015
		Prep Method:	NONE

Field ID:	OWS-006-08-EBT	ARDL Lab No.:	301104-02
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1320	Prep. Date:	09/27/2002
Matrix:	SOIL	Analysis Date:	10/02/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B5012
% Moisture:	11.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	1.8	11.3	ND		MG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/04/2002

Project Name:	USACE FT DEARBORN	Analysis:	MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.:	17207	Analytical Method:	8015
		Prep Method:	NONE

Field ID:	OWS-001-05-ESW	ARDL Lab No.:	301104-03
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1505	Prep. Date:	09/27/2002
Matrix:	SOIL	Analysis Date:	10/02/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B5012
% Moisture:	20.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	2	12.6	ND		MG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/04/2002

Project Name:	USACE FT DEARBORN	Analysis:	MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.:	17207	Analytical Method:	8015
		Prep Method:	NONE

Field ID:	OWS-002-05-ESW	ARDL Lab No.:	301104-04
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1522	Prep. Date:	09/27/2002
Matrix:	SOIL	Analysis Date:	10/02/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B5012
% Moisture:	20.1	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	2	12.5	ND		MG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/04/2002

Project Name:	USACE FT DEARBORN	Analysis:	MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.:	17207	Analytical Method:	8015
		Prep Method:	NONE

Field ID:	OWS-003-04-ESW	ARDL Lab No.:	301104-05
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1545	Prep. Date:	09/27/2002
Matrix:	SOIL	Analysis Date:	10/02/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B5012
% Moisture:	12.6	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	1.8	11.4	ND		MG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/04/2002

Project Name: USACE FT DEARBORN Analysis: MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.: 17207 Analytical Method: 8015
Prep Method: NONE

Field ID:	OWS-004-05-ESW	ARDL Lab No.:	301104-06
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1530	Prep. Date:	09/27/2002
Matrix:	SOIL	Analysis Date:	10/02/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B5012
% Moisture:	18.1	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	2	12.2	ND		MG/KG	1

INORGANICS

INORGANIC ANALYSIS DATA PACKAGE

FERGUSON HARBOR

Report Date: 10/01/02

Delivery Order No.: 17297

ARDL Report No.: 301104

Lab Name: ARDL, Inc.
Samples Received at ARDL: 18-Sep-02
Project Name: USACE Ft. Dearborn

CASE NARRATIVE

Sample ID No.	Date Collected	Lab ID No.	Analysis Requested
OWS-005-08-EBT	09/17/02	301104-01	Total Metals(1), Total Solids
OWS-006-08-EBT	09/17/02	301104-02	Total Metals(1), Total Solids
OWS-001-05-ESW	09/17/02	301104-03	Total Metals(1), Total Solids
OWS-002-05-ESW	09/17/02	301104-04	Total Metals(1), Total Solids
OWS-003-04-ESW	09/17/02	301104-05	Total Metals(1), Total Solids
OWS-004-05-ESW	09/17/02	301104-06	Total Metals(1), Total Solids

(1) Including aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, nickel, potassium, selenium, silver, sodium, thallium, vanadium and zinc.

The quality control data are summarized as follows:

LABORATORY CONTROL SAMPLES
Percent recovery of all LCS analyses were within control limits.

PREPARATION BLANKS
Results of all preparation blanks were within acceptable limits.

MATRIX SPIKES
Percent recovery of all matrix spikes and matrix spike duplicates except 2 of 2 for antimony, cobalt and nickel were within control limits. Sample results for aluminum, iron and manganese were greater than 4 times the spike amount; therefore, percent recovery was not considered.

DUPLICATES
RPD on all duplicate analyses were within control limits.
All duplicate analyses are reported as MS/MSD except calcium, magnesium, potassium, sodium and total solids which are reported as sample/duplicate.

Release of the data contained in this package has been authorized by the Technical Services Manager or his designee as verified by the following signature.

Daniel J. Gillespie
Technical Services Manager

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/01/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17207

Field ID: OWS-005-08-EBT ARDL No: 301104-01
Sampling Loc'n: NONE Received: 09/18/2002
Sampling Date: 09/17/2002 Matrix: SOIL
Sampling Time: 1334 Moisture: 16.5

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12	6480	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Antimony	0.6	0.92	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Arsenic	0.36	6.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Barium	1.2	33.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Beryllium	0.12	0.37	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cadmium	0.48	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Calcium	12	62500	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Chromium	0.6	11.6	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cobalt	0.6	15.0	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Copper	1.2	22.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Iron	6	14000	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Lead	0.36	10.6	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Magnesium	12	37600	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Manganese	0.6	676	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Mercury	0.096	ND	MG/KG	7470A	7470A	09/23/02	09/23/02	C1641
Nickel	1.8	26.6	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Potassium	240	1700	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Selenium	0.6	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Silver	0.6	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Sodium	47.9	157	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Thallium	0.36	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Vanadium	0.6	14.0	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Zinc	0.6	33.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Solids, Percent	1	83.5	%	NONE	160.3	NA	09/18/02	09199456

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/01/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17207

Field ID: OWS-006-08-EBT ARDL No: 301104-02
Sampling Loc'n: NONE Received: 09/18/2002
Sampling Date: 09/17/2002 Matrix: SOIL
Sampling Time: 1320 Moisture: 11.7

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	11.3	5080	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Antimony	0.57	0.99	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Arsenic	0.34	9.2	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Barium	1.1	26.0	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Beryllium	0.11	0.33	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cadmium	0.45	0.62	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Calcium	11.3	55400	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Chromium	0.57	9.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cobalt	0.57	6.2	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Copper	1.1	24.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Iron	5.7	17300	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Lead	0.34	11.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Magnesium	11.3	33700	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Manganese	0.57	359	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Mercury	0.091	ND	MG/KG	7470A	7470A	09/23/02	09/23/02	C1641
Nickel	1.7	17.8	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Potassium	227	1310	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Selenium	0.57	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Silver	0.57	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Sodium	45.3	137	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Thallium	0.34	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Vanadium	0.57	11.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Zinc	0.57	52.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Solids, Percent	1	88.3	%	NONE	160.3	NA	09/18/02	09199456

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/01/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17207

Field ID: OWS-001-05-ESW ARDL No: 301104-03
Sampling Loc'n: NONE Received: 09/18/2002
Sampling Date: 09/17/2002 Matrix: SOIL
Sampling Time: 1505 Moisture: 20.7

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.6	11800	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Antimony	0.63	1.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Arsenic	0.38	10.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Barium	1.3	80.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Beryllium	0.13	0.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cadmium	0.5	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Calcium	12.6	11900	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Chromium	0.63	16.6	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cobalt	0.63	8.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Copper	1.3	29.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Iron	6.3	21800	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Lead	0.38	43.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Magnesium	12.6	8560	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Manganese	0.63	459	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Mercury	0.1	ND	MG/KG	7470A	7470A	09/23/02	09/23/02	C1641
Nickel	1.9	21.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Potassium	252	1320	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Selenium	0.63	0.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Silver	0.63	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Sodium	50.4	101	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Thallium	0.38	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Vanadium	0.63	26.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Zinc	0.63	60.2	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Solids, Percent	1	79.3	%	NONE	160.3	NA	09/18/02	09199456

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/01/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17207

Field ID: OWS-002-05-ESW ARDL No: 301104-04
Sampling Loc'n: NONE Received: 09/18/2002
Sampling Date: 09/17/2002 Matrix: SOIL
Sampling Time: 1522 Moisture: 20.1

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.5	11500	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Antimony	0.63	1.1	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Arsenic	0.38	8.2	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Barium	1.3	99.0	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Beryllium	0.13	0.63	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cadmium	0.5	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Calcium	12.5	12400	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Chromium	0.63	14.4	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cobalt	0.63	9.8	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Copper	1.3	20.2	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Iron	6.3	17300	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Lead	0.38	15.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Magnesium	12.5	7230	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Manganese	0.63	518	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Mercury	0.1	ND	MG/KG	7470A	7470A	09/23/02	09/23/02	C1641
Nickel	1.9	15.0	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Potassium	250	1110	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Selenium	0.63	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Silver	0.63	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Sodium	50.1	85.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Thallium	0.38	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Vanadium	0.63	23.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Zinc	0.63	45.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Solids, Percent	1	79.9	%	NONE	160.3	NA	09/18/02	09199456

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/01/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17207

Field ID: OWS-003-04-ESW ARDL No: 301104-05
Sampling Loc'n: NONE Received: 09/18/2002
Sampling Date: 09/17/2002 Matrix: SOIL
Sampling Time: 1545 Moisture: 12.6

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	11.4	5220	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Antimony	0.57	0.82	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Arsenic	0.34	7.4	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Barium	1.1	28.8	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Beryllium	0.11	0.32	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cadmium	0.46	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Calcium	11.4	63400	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Chromium	0.57	9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cobalt	0.57	6.4	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Copper	1.1	20.6	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Iron	5.7	13600	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Lead	0.34	8.8	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Magnesium	11.4	38700	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Manganese	0.57	445	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Mercury	0.092	ND	MG/KG	7470A	7470A	09/23/02	09/23/02	C1641
Nickel	1.7	13.8	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Potassium	229	1050	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Selenium	0.57	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Silver	0.57	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Sodium	45.8	128	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Thallium	0.34	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Vanadium	0.57	12.1	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Zinc	0.57	29.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Solids, Percent	1	87.4	%	NONE	160.3	NA	09/18/02	09199456

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/01/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17207

Field ID: OWS-004-05-ESW ARDL No: 301104-06
Sampling Loc'n: NONE Received: 09/18/2002
Sampling Date: 09/17/2002 Matrix: SOIL
Sampling Time: 1530 Moisture: 18.1

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.2	9100	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Antimony	0.61	0.94	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Arsenic	0.37	7.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Barium	1.2	49.6	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Beryllium	0.12	0.54	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cadmium	0.49	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Calcium	12.2	56800	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Chromium	0.61	14.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cobalt	0.61	9.4	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Copper	1.2	28.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Iron	6.1	17900	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Lead	0.37	10.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Magnesium	12.2	26900	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Manganese	0.61	343	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Mercury	0.098	ND	MG/KG	7470A	7470A	09/23/02	09/23/02	C1641
Nickel	1.8	23.8	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Potassium	244	2010	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Selenium	0.61	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Silver	0.61	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Sodium	48.8	140	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Thallium	0.37	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Vanadium	0.61	18.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Zinc	0.61	40.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Solids, Percent	1	81.9	%	NONE	160.3	NA	09/18/02	09199456

ARDL REPORT NO. 301105
FERGUSON HARBOR
USACE-FT. DEARBORN SITE
PROJECT NO. 17297
SAMPLING DATE(S): 9/18/02

ORGANICS

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Organic Tests, Report No. 301105, 10/14/2002

Customer: FERGUSON HARBOUR INC
Address:
GROVEPORT, OH 43125

Sample Numbers ARDL	Customer	Analysis Method	Sampling Date	Preparation Date	Analysis Date
301105-01	OTH3-RO-CC-001	8270C	09/18/02	10/01/02	10/10/02
301105-01	OTH3-RO-CC-001	8082	09/18/02	09/30/02	10/02/02
301105-01	OTH3-RO-CC-001	8260B	09/18/02	10/01/02	10/08/02
301105-02	OTH3-RO-SO-001	8270C	09/18/02	10/01/02	10/10/02
301105-02	OTH3-RO-SO-001	8082	09/18/02	09/30/02	10/02/02
301105-02	OTH3-RO-SO-001	8260B	09/18/02	10/01/02	10/08/02
301105-03	OWS1-RO-SO-001	8270C	09/18/02	10/01/02	10/10/02
301105-03	OWS1-RO-SO-001	8082	09/18/02	09/30/02	10/02/02
301105-03	OWS1-RO-SO-001	8260B	09/18/02	10/01/02	10/08/02
301105-04	OWS1-RO-CC-001	8270C	09/18/02	10/01/02	10/10/02
301105-04	OWS1-RO-CC-001	8082	09/18/02	09/30/02	10/02/02
301105-04	OWS1-RO-CC-001	8260B	09/18/02	10/01/02	10/08/02
301105-05	FSS-DR-SO-001	8270C	09/18/02	10/01/02	10/10/02
301105-05	FSS-DR-SO-001	8082	09/18/02	09/30/02	10/02/02
301105-05	FSS-DR-SO-001	8260B	09/18/02	10/01/02	10/08/02

Standard USEPA data qualifiers may appear with results. These qualifiers and their meanings are listed below.

ND - Analyte concentration below method detection limit (MDL).
J - Estimated value. Analyte at or above MDL but below quantitation limit.
B - Analyte also detected in the Method Blank.
NC - Value not calculable.

ORGANIC ANALYSIS DATA PACKAGE

Contract No. USACE FT DEARBORN Date:10/17/02

Lab Name: ARDL, Inc.

ARDL Report No.: 301105 Samples Received at ARDL: 9/19/02

CASE NARRATIVE

TCLP VOA FRACTION - METHOD 8260

Soil samples were received by ARDL, Inc. on September 19, 2002, for TCLP extraction and VOA analysis for GC/MS. All extractions were performed within the method specified holding time.

No problems were encountered during the sample analyses.

TCLP BNA FRACTION - METHOD 8270

Soil samples were received by ARDL, Inc. on September 19, 2002, BNA/TCLP analysis. All analyses were performed according to low level protocol within method specified holding times.

No problems were encountered during the sample analyses.

TCLP PCB FRACTION - METHOD 8082

Soil samples were received by ARDL, Inc. on September 19, 2002, for TCLP PCI analysis. The samples were extracted within holding time requirements.

No problems were encountered in the analysis of these samples.

ORGANIC DATA REPORTING QUALIFIERS

The following organic data reporting qualifiers are used as required.

ND- Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the N code is not used.

P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the tw GC columns.

ORGANIC ANALYSIS DATA PACKAGE

Contract No. USACE FT DEARBORN Date:10/17/02

Lab Name: ARDL, Inc.

ARDL Report No.: 301105 Samples Received at ARDL: 9/19/02

CASE NARRATIVE (Continued)

ORGANIC DATA REPORTING QUALIFIERS (Continued)

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, do not apply this flag; instead use a laboratory-defined flag.

B - This flag is used when the analyte is found in the blank as well as the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must by used for a TIC as well as for a positively identified target compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. If one or more compounds have a response greater than full scale, except as noted in Exhibit D, the sample or extract must be diluted and re-analyzed according to the specifications in Exhibit D. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form 1 for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate copies of Form 1. The Form 1 for the diluted sample shall have the "DL" suffix appended to the sample number.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form 1 for the diluted sample, and all concentration values reported on that Form 1 are flagged with the "D" flag.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized for the Laboratory Manager or his designee, as verified by the following signature.

Daniel J. Gillespie
Technical Services Manager

TCLP VOA-8260B

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: VOA, TCLP
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030

Field ID:	OTH3-RO-CC-001	ARDL Lab No.:	301105-01
Desc/Location:	COMP 20-013,20-009,20-006	Lab Filename:	Y3025
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	0945	Prep. Date:	09/30/2002
Matrix:	SOIL	Analysis Date:	10/08/2002
Amount Used:	5 mL	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	1011AJRF
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Vinyl Chloride, TCLP	1.5	10.0	ND		UG/L	1
1,1-Dichloroethene, TCLP	0.54	5.0	ND		UG/L	1
2-Butanone, TCLP	19	50.0	ND		UG/L	1
Chloroform, TCLP	0.17	5.0	ND		UG/L	1
Carbon Tetrachloride, TCLP	0.35	5.0	ND		UG/L	1
Benzene, TCLP	0.8	5.0	ND		UG/L	1
1,2-Dichloroethane, TCLP	0.25	5.0	ND		UG/L	1
Trichloroethene, TCLP	0.75	5.0	ND		UG/L	1
Tetrachloroethene, TCLP	0.53	5.0	ND		UG/L	1
Chlorobenzene, TCLP	0.28	5.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	79-127	107%
1,2-Dichloroethane-d4	71-135	106%
Toluene-d8	89-133	106%
4-Bromofluorobenzene	72-129	103%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: VOA, TCLP
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030

Field ID:	OTH3-RO-SO-001	ARDL Lab No.:	301105-02
Desc/Location:	COMP 20-008,20-004,20-003	Lab Filename:	Y3026
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	1058	Prep. Date:	09/30/2002
Matrix:	SOIL	Analysis Date:	10/08/2002
Amount Used:	5 mL	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	1011AJRF
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Vinyl Chloride, TCLP	1.5	10.0	ND		UG/L	1
1,1-Dichloroethene, TCLP	0.54	5.0	ND		UG/L	1
2-Butanone, TCLP	19	50.0	ND		UG/L	1
Chloroform, TCLP	0.17	5.0	ND		UG/L	1
Carbon Tetrachloride, TCLP	0.35	5.0	ND		UG/L	1
Benzene, TCLP	0.8	5.0	ND		UG/L	1
1,2-Dichloroethane, TCLP	0.25	5.0	ND		UG/L	1
Trichloroethene, TCLP	0.75	5.0	ND		UG/L	1
Tetrachloroethene, TCLP	0.53	5.0	ND		UG/L	1
Chlorobenzene, TCLP	0.28	5.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	79-127	113%
1,2-Dichloroethane-d4	71-135	108%
Toluene-d8	89-133	111%
4-Bromofluorobenzene	72-129	107%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: VOA, TCLP
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030

Field ID:	OWS1-RO-SO-001	ARDL Lab No.:	301105-03
Desc/Location:	COMP R25239R,R25326RT	Lab Filename:	Y3027
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	1147	Prep. Date:	09/30/2002
Matrix:	SOIL	Analysis Date:	10/08/2002
Amount Used:	5 mL	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	1011AJRF
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Vinyl Chloride, TCLP	1.5	10.0	ND		UG/L	1
1,1-Dichloroethene, TCLP	0.54	5.0	ND		UG/L	1
2-Butanone, TCLP	19	50.0	ND		UG/L	1
Chloroform, TCLP	0.17	5.0	ND		UG/L	1
Carbon Tetrachloride, TCLP	0.35	5.0	ND		UG/L	1
Benzene, TCLP	0.8	5.0	ND		UG/L	1
1,2-Dichloroethane, TCLP	0.25	5.0	ND		UG/L	1
Trichloroethene, TCLP	0.75	5.0	ND		UG/L	1
Tetrachloroethene, TCLP	0.53	5.0	ND		UG/L	1
Chlorobenzene, TCLP	0.28	5.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	79-127	112%
1,2-Dichloroethane-d4	71-135	108%
Toluene-d8	89-133	102%
4-Bromofluorobenzene	72-129	104%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: VOA, TCLP
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030

Field ID:	OWS1-RO-CC-001	ARDL Lab No.:	301105-04
Desc/Location:	COMP ROLL OFF R25353	Lab Filename:	Y3028
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	1220	Prep. Date:	09/30/2002
Matrix:	SOIL	Analysis Date:	10/08/2002
Amount Used:	5 mL	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	1011AJRF
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Vinyl Chloride, TCLP	1.5	10.0	ND		UG/L	1
1,1-Dichloroethene, TCLP	0.54	5.0	ND		UG/L	1
2-Butanone, TCLP	19	50.0	ND		UG/L	1
Chloroform, TCLP	0.17	5.0	ND		UG/L	1
Carbon Tetrachloride, TCLP	0.35	5.0	ND		UG/L	1
Benzene, TCLP	0.8	5.0	ND		UG/L	1
1,2-Dichloroethane, TCLP	0.25	5.0	ND		UG/L	1
Trichloroethene, TCLP	0.75	5.0	ND		UG/L	1
Tetrachloroethene, TCLP	0.53	5.0	ND		UG/L	1
Chlorobenzene, TCLP	0.28	5.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	79-127	111%
1,2-Dichloroethane-d4	71-135	110%
Toluene-d8	89-133	101%
4-Bromofluorobenzene	72-129	107%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: VOA, TCLP
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030

Field ID:	FSS-DR-SO-001	ARDL Lab No.:	301105-05
Desc/Location:	GRAB FROM DRUM	Lab Filename:	Y3029
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	1313	Prep. Date:	09/30/2002
Matrix:	SOIL	Analysis Date:	10/08/2002
Amount Used:	5 mL	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	1011AJRF
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Vinyl Chloride, TCLP	1.5	10.0	ND		UG/L	1
1,1-Dichloroethene, TCLP	0.54	5.0	ND		UG/L	1
2-Butanone, TCLP	19	50.0	ND		UG/L	1
Chloroform, TCLP	0.17	5.0	ND		UG/L	1
Carbon Tetrachloride, TCLP	0.35	5.0	ND		UG/L	1
Benzene, TCLP	0.8	5.0	ND		UG/L	1
1,2-Dichloroethane, TCLP	0.25	5.0	ND		UG/L	1
Trichloroethene, TCLP	0.75	5.0	ND		UG/L	1
Tetrachloroethene, TCLP	0.53	5.0	ND		UG/L	1
Chlorobenzene, TCLP	0.28	5.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	79-127	111%
1,2-Dichloroethane-d4	71-135	107%
Toluene-d8	89-133	108%
4-Bromofluorobenzene	72-129	101%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

TCLP BNA-8270

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/14/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S, TCLP
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3510

Field ID:	OTH3-RO-CC-001	ARDL Lab No.:	301105-01
Desc/Location:	COMP 20-013,20-009,20-006	Lab Filename:	T7122
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	0945	Prep. Date:	10/01/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	1000 mL	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5025
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Pyridine, TCLP	2.1	10.0	ND		UG/L	1
1,4-Dichlorobenzene, TCLP	0.64	10.0	ND		UG/L	1
2-Methylphenol, TCLP	1.4	10.0	ND		UG/L	1
3 & 4-Methylphenol, TCLP	1.3	10.0	ND		UG/L	1
Hexachloroethane, TCLP	0.71	10.0	ND		UG/L	1
Nitrobenzene, TCLP	0.75	10.0	ND		UG/L	1
Hexachlorobutadiene, TCLP	0.59	10.0	ND		UG/L	1
2,4,6-Trichlorophenol, TCLP	1.7	10.0	ND		UG/L	1
2,4,5-Trichlorophenol, TCLP	1.7	10.0	ND		UG/L	1
2,4-Dinitrotoluene, TCLP	0.73	10.0	ND		UG/L	1
Hexachlorobenzene, TCLP	0.5	10.0	ND		UG/L	1
Pentachlorophenol, TCLP	1.2	10.0	9.2	J	UG/L	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	51-117	80%
2-Fluorophenol	23-69	57%
Nitrobenzene-d5	29-143	77%
2,4,6-Tribromophenol	39-125	115%
Phenol-d5	14-55	40%
Terphenyl-d14	54-110	71%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/14/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S, TCLP
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3510

Field ID:	OTH3-RO-SO-001	ARDL Lab No.:	301105-02
Desc/Location:	COMP 20-008,20-004,20-003	Lab Filename:	T7123
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	1058	Prep. Date:	10/01/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	1000 mL	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5025
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Pyridine, TCLP	2.1	10.0	ND		UG/L	1
1,4-Dichlorobenzene, TCLP	0.64	10.0	ND		UG/L	1
2-Methylphenol, TCLP	1.4	10.0	ND		UG/L	1
3 & 4-Methylphenol, TCLP	1.3	10.0	ND		UG/L	1
Hexachloroethane, TCLP	0.71	10.0	ND		UG/L	1
Nitrobenzene, TCLP	0.75	10.0	ND		UG/L	1
Hexachlorobutadiene, TCLP	0.59	10.0	ND		UG/L	1
2,4,6-Trichlorophenol, TCLP	1.7	10.0	ND		UG/L	1
2,4,5-Trichlorophenol, TCLP	1.7	10.0	ND		UG/L	1
2,4-Dinitrotoluene, TCLP	0.73	10.0	ND		UG/L	1
Hexachlorobenzene, TCLP	0.5	10.0	ND		UG/L	1
Pentachlorophenol, TCLP	1.2	10.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	51-117	75%
2-Fluorophenol	23-69	50%
Nitrobenzene-d5	29-143	71%
2,4,6-Tribromophenol	39-125	105%
Phenol-d5	14-55	34%
Terphenyl-d14	54-110	77%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/14/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S, TCLP
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3510

Field ID:	OWS1-RO-SO-001	ARDL Lab No.:	301105-03
Desc/Location:	COMP R25239R,R25326RT	Lab Filename:	T7126
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	1147	Prep. Date:	10/01/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	1000 mL	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5025
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Pyridine, TCLP	2.1	10.0	ND		UG/L	1
1,4-Dichlorobenzene, TCLP	0.64	10.0	ND		UG/L	1
2-Methylphenol, TCLP	1.4	10.0	ND		UG/L	1
3 & 4-Methylphenol, TCLP	1.3	10.0	ND		UG/L	1
Hexachloroethane, TCLP	0.71	10.0	ND		UG/L	1
Nitrobenzene, TCLP	0.75	10.0	ND		UG/L	1
Hexachlorobutadiene, TCLP	0.59	10.0	ND		UG/L	1
2,4,6-Trichlorophenol, TCLP	1.7	10.0	ND		UG/L	1
2,4,5-Trichlorophenol, TCLP	1.7	10.0	ND		UG/L	1
2,4-Dinitrotoluene, TCLP	0.73	10.0	ND		UG/L	1
Hexachlorobenzene, TCLP	0.5	10.0	ND		UG/L	1
Pentachlorophenol, TCLP	1.2	10.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	51-117	69%
2-Fluorophenol	23-69	46%
Nitrobenzene-d5	29-143	65%
2,4,6-Tribromophenol	39-125	87%
Phenol-d5	14-55	32%
Terphenyl-d14	54-110	69%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/14/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S, TCLP
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3510

Field ID:	OWS1-RO-CC-001	ARDL Lab No.:	301105-04
Desc/Location:	COMP ROLL OFF R25353	Lab Filename:	T7127
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	1220	Prep. Date:	10/01/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	1000 mL	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5025
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Pyridine, TCLP	2.1	10.0	ND		UG/L	1
1,4-Dichlorobenzene, TCLP	0.64	10.0	ND		UG/L	1
2-Methylphenol, TCLP	1.4	10.0	ND		UG/L	1
3 & 4-Methylphenol, TCLP	1.3	10.0	ND		UG/L	1
Hexachloroethane, TCLP	0.71	10.0	ND		UG/L	1
Nitrobenzene, TCLP	0.75	10.0	ND		UG/L	1
Hexachlorobutadiene, TCLP	0.59	10.0	ND		UG/L	1
2,4,6-Trichlorophenol, TCLP	1.7	10.0	ND		UG/L	1
2,4,5-Trichlorophenol, TCLP	1.7	10.0	ND		UG/L	1
2,4-Dinitrotoluene, TCLP	0.73	10.0	ND		UG/L	1
Hexachlorobenzene, TCLP	0.5	10.0	ND		UG/L	1
Pentachlorophenol, TCLP	1.2	10.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	51-117	77%
2-Fluorophenol	23-69	49%
Nitrobenzene-d5	29-143	71%
2,4,6-Tribromophenol	39-125	97%
Phenol-d5	14-55	36%
Terphenyl-d14	54-110	73%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/14/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S, TCLP
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3510

Field ID:	FSS-DR-SO-001	ARDL Lab No.:	301105-05
Desc/Location:	GRAB FROM DRUM	Lab Filename:	T7128
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	1313	Prep. Date:	10/01/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	1000 mL	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5025
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Pyridine, TCLP	2.1	10.0	ND		UG/L	1
1,4-Dichlorobenzene, TCLP	0.64	10.0	ND		UG/L	1
2-Methylphenol, TCLP	1.4	10.0	ND		UG/L	1
3 & 4-Methylphenol, TCLP	1.3	10.0	ND		UG/L	1
Hexachloroethane, TCLP	0.71	10.0	ND		UG/L	1
Nitrobenzene, TCLP	0.75	10.0	ND		UG/L	1
Hexachlorobutadiene, TCLP	0.59	10.0	ND		UG/L	1
2,4,6-Trichlorophenol, TCLP	1.7	10.0	ND		UG/L	1
2,4,5-Trichlorophenol, TCLP	1.7	10.0	ND		UG/L	1
2,4-Dinitrotoluene, TCLP	0.73	10.0	ND		UG/L	1
Hexachlorobenzene, TCLP	0.5	10.0	ND		UG/L	1
Pentachlorophenol, TCLP	1.2	10.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	51-117	74%
2-Fluorophenol	23-69	48%
Nitrobenzene-d5	29-143	71%
2,4,6-Tribromophenol	39-125	88%
Phenol-d5	14-55	35%
Terphenyl-d14	54-110	70%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

TCLP PCB's-8082

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: TCLP PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3510

Field ID:	OTH3-RO-CC-001	ARDL Lab No.:	301105-01
Desc/Location:	COMP 20-013,20-009,20-006	Lab Filename:	
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	0945	Prep. Date:	09/30/2002
Matrix:	SOIL	Analysis Date:	10/02/2002
Amount Used:	1000 mL	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5018
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016, TCLP	0.23	1.0	ND		UG/L	1
Aroclor 1221, TCLP	0.58	2.0	ND		UG/L	1
Aroclor 1232, TCLP	0.33	1.0	ND		UG/L	1
Aroclor 1242, TCLP	0.14	1.0	ND		UG/L	1
Aroclor 1248, TCLP	0.12	1.0	ND		UG/L	1
Aroclor 1254, TCLP	0.16	1.0	ND		UG/L	1
Aroclor 1260, TCLP	0.15	1.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	17-101	63%
Tetrachloro-m-xylene	45-92	77%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: TCLP PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3510

Field ID:	OTH3-RO-SO-001	ARDL Lab No.:	301105-02
Desc/Location:	COMP 20-008,20-004,20-003	Lab Filename:	
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	1058	Prep. Date:	09/30/2002
Matrix:	SOIL	Analysis Date:	10/02/2002
Amount Used:	1000 mL	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5018
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016, TCLP	0.23	1.0	ND		UG/L	1
Aroclor 1221, TCLP	0.58	2.0	ND		UG/L	1
Aroclor 1232, TCLP	0.33	1.0	ND		UG/L	1
Aroclor 1242, TCLP	0.14	1.0	ND		UG/L	1
Aroclor 1248, TCLP	0.12	1.0	ND		UG/L	1
Aroclor 1254, TCLP	0.16	1.0	ND		UG/L	1
Aroclor 1260, TCLP	0.15	1.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	17-101	76%
Tetrachloro-m-xylene	45-92	77%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: TCLP PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3510

Field ID:	OWS1-RO-SO-001	ARDL Lab No.:	301105-03
Desc/Location:	COMP R25239R,R25326RT	Lab Filename:	
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	1147	Prep. Date:	09/30/2002
Matrix:	SOIL	Analysis Date:	10/02/2002
Amount Used:	1000 mL	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5018
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016, TCLP	0.23	1.0	ND		UG/L	1
Aroclor 1221, TCLP	0.58	2.0	ND		UG/L	1
Aroclor 1232, TCLP	0.33	1.0	ND		UG/L	1
Aroclor 1242, TCLP	0.14	1.0	ND		UG/L	1
Aroclor 1248, TCLP	0.12	1.0	ND		UG/L	1
Aroclor 1254, TCLP	0.16	1.0	ND		UG/L	1
Aroclor 1260, TCLP	0.15	1.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	17-101	66%
Tetrachloro-m-xylene	45-92	70%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: TCLP PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3510

Field ID:	OWS1-RO-CC-001	ARDL Lab No.:	301105-04
Desc/Location:	COMP ROLL OFF R25353	Lab Filename:	
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	1220	Prep. Date:	09/30/2002
Matrix:	SOIL	Analysis Date:	10/02/2002
Amount Used:	1000 mL	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5018
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016, TCLP	0.23	1.0	ND		UG/L	1
Aroclor 1221, TCLP	0.58	2.0	ND		UG/L	1
Aroclor 1232, TCLP	0.33	1.0	ND		UG/L	1
Aroclor 1242, TCLP	0.14	1.0	ND		UG/L	1
Aroclor 1248, TCLP	0.12	1.0	ND		UG/L	1
Aroclor 1254, TCLP	0.16	1.0	ND		UG/L	1
Aroclor 1260, TCLP	0.15	1.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	17-101	78%
Tetrachloro-m-xylene	45-92	61%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: TCLP PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3510

Field ID:	FSS-DR-SO-001	ARDL Lab No.:	301105-05
Desc/Location:	GRAB FROM DRUM	Lab Filename:	
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	1313	Prep. Date:	09/30/2002
Matrix:	SOIL	Analysis Date:	10/02/2002
Amount Used:	1000 mL	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5018
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016, TCLP	0.23	1.0	ND		UG/L	1
Aroclor 1221, TCLP	0.58	2.0	ND		UG/L	1
Aroclor 1232, TCLP	0.33	1.0	ND		UG/L	1
Aroclor 1242, TCLP	0.14	1.0	ND		UG/L	1
Aroclor 1248, TCLP	0.12	1.0	ND		UG/L	1
Aroclor 1254, TCLP	0.16	1.0	ND		UG/L	1
Aroclor 1260, TCLP	0.15	1.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	17-101	54%
Tetrachloro-m-xylene	45-92	69%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

INORGANICS

INORGANIC ANALYSIS DATA PACKAGE

FERGUSON HARBOR

Report Date: 10/03/02

Delivery Order No.: 17297

ARDL Report No.: 301105

Lab Name: ARDL, Inc.
Samples Received at ARDL: 19-Sep-02
Project Name: USACE Ft. Dearborn

CASE NARRATIVE

Sample ID No.	Date Collected	Lab ID No.	Analysis Requested
OTH3-RO-CC-001	09/18/02	301105-01	TCLP Metals(1), Other Inorganics(2)
OTH3-RO-SO-001	09/18/02	301105-02	TCLP Metals(1), Other Inorganics(2)
OWS1-RO-SO-001	09/18/02	301105-03	TCLP Metals(1), Other Inorganics(2)
OWS1-RO-CC-001	09/18/02	301105-04	TCLP Metals(1), Other Inorganics(2)
FSS-DR-SO-001	09/18/02	301105-05	TCLP Metals(1), Other Inorganics(2)
OWS1-BT-WT-001	09/18/02	301105-06	Other Inorganics(3)

(1) Including arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver.

(2) Including flashpoint, paint filter and pH.

(3) Including BOD, chloride, chromium +6 and total suspended solids.

NOTE: TCLP extraction was accomplished by Method 1311.

The quality control data are summarized as follows:

LABORATORY CONTROL SAMPLES
Percent recovery of all LCS analyses were within control limits.

PREPARATION BLANKS
Results of all preparation blanks were within acceptable limits.

MATRIX SPIKES
Percent recovery of all matrix spikes and matrix spike duplicates were within control limits.

DUPLICATES
RPD on all duplicate analyses except total suspended solids were within control limits.
All duplicate analyses are reported as MS/MSD except BOD, chloride, chromiuim +6, flashpoint, paint filter, pH and total suspended solids which are reported as sample/duplicate.

Release of the data contained in this package has been authorized by the Technical Services Manager or his designee as verified by the following signature.

Daniel J. Gillespie
Technical Services Manager

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/03/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: OTH3-RO-CC-001 ARDL No: 301105-01
Sampling Loc'n: COMP 20-013,20-009,20-006 Received: 09/19/2002
Sampling Date: 09/18/2002 Matrix: SOIL
Sampling Time: 0945 Moisture: No Moisture Present

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Arsenic, TCLP	0.025	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Barium, TCLP	0.01	0.11	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Cadmium, TCLP	0.005	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Chromium, TCLP	0.005	0.026	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Lead, TCLP	0.025	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Mercury, TCLP	0.0002	ND	MG/L	7470A	7470A	09/27/02	09/27/02	C1649
Selenium, TCLP	0.05	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Silver, TCLP	0.005	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Flash Point (Closed)	45	>200	DEG F	NONE	1010	NA	10/02/02	10039490
Paint Filter Test		PASSED		NONE	9095	NA	10/01/02	10029[illegible]
pH	0.2	8.1	PH UNITS	NONE	9045C	NA	09/19/02	09209

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/03/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: OTH3-RO-SO-001 ARDL No: 301105-02
Sampling Loc'n: COMP 20-008,20-004,20-003 Received: 09/19/2002
Sampling Date: 09/18/2002 Matrix: SOIL
Sampling Time: 1058 Moisture: No Moisture Present

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Arsenic, TCLP	0.025	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Barium, TCLP	0.01	0.66	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Cadmium, TCLP	0.005	0.012	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Chromium, TCLP	0.005	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Lead, TCLP	0.025	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Mercury, TCLP	0.0002	ND	MG/L	7470A	7470A	09/27/02	09/27/02	C1649
Selenium, TCLP	0.05	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Silver, TCLP	0.005	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Flash Point (Closed)	45	>200	DEG F	NONE	1010	NA	10/02/02	10039490
Paint Filter Test		PASSED		NONE	9095	NA	10/01/02	10029488
pH	0.2	7.7	PH UNITS	NONE	9045C	NA	09/19/02	09209461

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/03/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: OWS1-RO-SO-001 ARDL No: 301105-03
Sampling Loc'n: COMP R25239R,R25326RT Received: 09/19/2002
Sampling Date: 09/18/2002 Matrix: SOIL
Sampling Time: 1147 Moisture: No Moisture Present

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Arsenic, TCLP	0.025	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Barium, TCLP	0.01	0.51	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Cadmium, TCLP	0.005	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Chromium, TCLP	0.005	0.0051	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Lead, TCLP	0.025	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Mercury, TCLP	0.0002	ND	MG/L	7470A	7470A	09/27/02	09/27/02	C1649
Selenium, TCLP	0.05	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Silver, TCLP	0.005	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Flash Point (Closed)	45	>200	DEG F	NONE	1010	NA	10/02/02	10039490
Paint Filter Test		PASSED		NONE	9095	NA	10/01/02	10029[illegible]
pH	0.2	9.1	PH UNITS	NONE	9045C	NA	09/19/02	09209

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/03/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: OWS1-RO-CC-001 ARDL No: 301105-04
Sampling Loc'n: COMP ROLL OFF R25353 Received: 09/19/2002
Sampling Date: 09/18/2002 Matrix: SOIL
Sampling Time: 1220 Moisture: No Moisture Present

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Arsenic, TCLP	0.025	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Barium, TCLP	0.01	0.14	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Cadmium, TCLP	0.005	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Chromium, TCLP	0.005	0.0051	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Lead, TCLP	0.025	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Mercury, TCLP	0.0002	ND	MG/L	7470A	7470A	09/27/02	09/27/02	C1649
Selenium, TCLP	0.05	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Silver, TCLP	0.005	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Flash Point (Closed)	45	>200	DEG F	NONE	1010	NA	10/02/02	10039490
Paint Filter Test		PASSED		NONE	9095	NA	10/01/02	10029488
pH	0.2	10.9	PH UNITS	NONE	9045C	NA	09/19/02	09209461

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/03/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: FSS-DR-SO-001 ARDL No: 301105-05
Sampling Loc'n: GRAB FROM DRUM Received: 09/19/2002
Sampling Date: 09/18/2002 Matrix: SOIL
Sampling Time: 1313 Moisture: No Moisture Present

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Arsenic, TCLP	0.025	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Barium, TCLP	0.01	0.43	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Cadmium, TCLP	0.005	0.019	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Chromium, TCLP	0.005	0.0056	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Lead, TCLP	0.025	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Mercury, TCLP	0.0002	ND	MG/L	7470A	7470A	09/27/02	09/27/02	C1649
Selenium, TCLP	0.05	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Silver, TCLP	0.005	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Flash Point (Closed)	45	>200	DEG F	NONE	1010	NA	10/02/02	10039490
Paint Filter Test		PASSED		NONE	9095	NA	10/01/02	10029[illegible]
pH	0.2	8.0	PH UNITS	NONE	9045C	NA	09/19/02	09209

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/03/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: OWS1-BT-WT-001 ARDL No: 301105-06
Sampling Loc'n: GRAB TANK P-4229 FROM BAKER Received: 09/19/2002
Sampling Date: 09/18/2002 Matrix: WATER
Sampling Time: 1345 Moisture: NA

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Biological Oxygen Demand	1	7.1	MG/L	NONE	405.1	NA	09/20/02	09269472
Chloride	2	25.5	MG/L	NONE	300.0	NA	09/20/02	09249466
Chromium (VI)	0.01	ND	MG/L	NONE	7196A	NA	09/20/02	09269471
Solids, Total Suspended	2.5	42.8	MG/L	NONE	160.2	NA	09/19/02	09209460

FERGUSON · HARBOUR INCORPORATED

Reports/Billing To:

CHAIN-OF-CUSTODY RECORD

Page ____ of ____

Project # 17297	P.O.#	Laboratory ARDL, INC.	
Project Name USAEC FT. DEARBORN		Address P.O. BOX 1566 400 AVIATION DR	
Project Location CHICAGO, IL		MT. VERNON, IL 62864	
Project Manager JIM PACK		Sampler(s) GREG KNIGHT	

ANALYSES REQUESTED — Enter No. of Containers Submitted for Each Analysis

SAMPLE NUMBER/DESIGNATION ZZZZ-ZZ99-ZZ99	DATE 19__	TIME	COMP	GRAB	SAMPLE LOCATION/DESCRIPTION	TOTAL CONTAINERS	VOC	SVOC	PAH	RCB	TAL METALS						Comments	SEALS INTACT AT LAB (Y, N, INITIALS)
FIP-001-06-SSS	9/11/02	1525		X	OTH-1 SOUTHEAST HOLE	4	X	X	X	X	X							S
FIP-001-06-SSS MS/MSD	9/11/02	1525		X	OTH-1 SOUTHEAST HOLE	1		X	X	X	X						MS/MSD	S
FIP-001-06-SSS-MS	9/11/02	1525		X	OTH-1 SOUTHEAST HOLE	3	X										MS	S
FIP-001-06-SSS-MSD	9/11/02	1525		X	OTH-1 SOUTHEAST HOLE	3	X										MSD	S
FIP-004-06-SSS	9/11/02	1650		X	OTH-1 NORTHEAST HOLE	4	X	X	X	X	X							S
FIP-002-06-SSS	9/11/02	1736		X	OTH-1 SOUTHWEST HOLE	4	X	X	X	X	X							S
FIP-003-06-ERB	9/11/02	1827		X	OTH-1 SOUTHWEST HOLE FINAL	7	X	X	X	X	X							S
FIP-003-06-SSS	9/11/02	1849		X	OTH-1 NORTHWEST HOLE	4	X	X	X	X	X							S
					Total Containers													

Relinquished By (Print)	DATE	Received by (Print)	Relinquished By (Print)	DATE	Received by (Print)
GREGORY A. KNIGHT	9/11/02	FED EX AIRBILL #826319781158			
(Sign) Gregory A. Knight	TIME 1949	(Sign) —	(Sign)	TIME	(Sign)
Relinquished By (Print)	DATE 9/12/02	Received by (Print) D L Cockrum	Relinquished By (Print)	DATE	Received by (Print)
(Sign)	TIME 0915	(Sign) D L Cockrum	(Sign)	TIME	(Sign)

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Project Name FT DEARBORN USACE		Address P.O. BOX 1566 400 AVIATION DR	
Project Location CHICAGO, IL		MT. VERNON, IL 62864	
Project Manager JIM FACCI		Sampler(s) GARELO KNIGHT	

ANALYSES REQUESTED — Enter No. of Containers Submitted for Each Analysis

SAMPLE NUMBER/DESIGNATION ZZZZ-ZZ99-ZZ99	DATE 19__	TIME	COMP	GRAB	SAMPLE LOCATION/DESCRIPTION	TOTAL CONTAINERS	VOC	SVOC	PAH	PCB	TAL METALS	GLYCOL					Comments	SEALS INTACT AT LAB (Y, N, INITIALS)
VWR-002-02-FRBT	9/12/02	1500		X	LOCATION #2 ON DRAWING													
VWR-004-02-ESW	9/12/02	1330		X	LOCATION #2 ON DRAWING	4	X	X	X	X	X							
VWR-004-02-ESW	9/12/02	1330		X	LOCATION #2 ON DRAWING	1						X						
VWR-002-02-FRB	9/12/02	1500		X	LOCATION #2 ON DRAWING	1					X							
FSD-005-08-EBT	9/12/02	1605		X	LOCATION #5 ON DRAWING	4	X	X	X	X	X							
FSD-006-05-EBT	9/12/02	1611		X	LOCATION #6 ON DRAWING	4	X	X	X	X	X							
FSD-007-05-EBT	9/12/02	1611		X	LOCATION #6 ON DRAWING	4	X	X	X	X	X							
VWR-002-02-ESW	9/12/02	1715		X	LOCATION #2 ON DRAWING	5	X	X	X	X	X	X						
VWR-007-04-EBT	9/12/02	1722		X	LOCATION #7 ON DRAWING	5	X	X	X	X	X	X						
VWR-001-03-EBT	9/12/02	1730		X	LOCATION #1 ON DRAWINGS	5	X	X	X	X	X	X						
					Total Containers													

Relinquished By (Print)	DATE	Received by (Print)	Relinquished By (Print)	DATE	Received by (Print)
GARELO KNIGHT	9/12/02	FED EX AIRBILL 826319381125			
(Sign) Garelo A. Knight	TIME 1955	(Sign) CAK 9/12/02	(Sign)	TIME	(Sign)
Relinquished By (Print)	DATE 9-13-02	Received by (Print)	Relinquished By (Print)	DATE	Received by (Print)
(Sign)	TIME 0900	(Sign) R.L. Lackrum	(Sign)	TIME	(Sign)

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Project Location CHICAGO, IL
Project Manager JIM TYCL

Laboratory ARDL, INC.
Address P.O. BOX 1566 400 AVIATION DR.
MT. VERNON, IL 62864
Sampler(s) GREG KNIGHT

ANALYSES REQUESTED

SAMPLE NUMBER/DESIGNATION ZZZZ-ZZ99-ZZ99	DATE 19__	TIME	COMP	GRAB	SAMPLE LOCATION/DESCRIPTION	TOTAL CONTAINERS	VOC	SVOC	PAH	PCB	TAL METALS	GLYCOL					Comments	SEALS INTACT AT LAB (Y, MINITIALS)
VWR-005-02-EBT	9/12/02	1058		X	LOCATION #5 ON DRAWING	4	X	X	X	X	X							
VWR-005-02-MS/MSD	9/12/02	1058		X	LOCATION #5 ON DRAWING	1		X	X	X	X							
VWR-005-02-MS	9/12/02	1058		X	LOCATION #5 ON DRAWING	3	X											
VWR-005-02-MSD	9/12/02	1058		X	LOCATION #5 ON DRAWING	3	X											
VWR-005-02-EBT	9/12/02	1058		X	LOCATION #5 ON DRAWING	1						X						
VWR-005-02-MS/MSD	9/12/02	1058		X	LOCATION #5 ON DRAWING	1						X						
VWR-006-02-EBT	9/12/02	1246		X	LOCATION #6 ON DRAWING	4	X	X	X	X	X							
9-12-02-TB	9/12/02	1500		X	TRIP BLANKS	2	X											
VWR-006-02-EBT	9/12/02	1246		X	LOCATION #6 ON DRAWINGS	1						X						
VWR-008-02-EBT	9/12/02	1246		X	LOCATION #6 ON DRAWING	4	X	X	X	X	X							
VWR-008-02-EBT	9/12/02	1246		X	LOCATION #6 ON DRAWING	1						X						
					Total Containers													

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GREG KNIGHT	9/12/02	DJ Gillespie			
(Sign) Gregory A. Knight	TIME 15:40	(Sign) DJ Gillespie	(Sign)	TIME	(Sign)
Relinquished By (Print) DJ Gillespie	DATE 9/12/02	Received by (Print) Rob Dismang	Relinquished By (Print)	DATE	Received by (Print)
(Sign) DJ Gillespie	TIME 21:00	(Sign)	(Sign)	TIME	(Sign)

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Project Location CHICAGO, IL		MT. VERNON, IL 62864	
Project Manager JIM FACCI		Sampler(s) GREG KNIGHT	

ANALYSES REQUESTED — Enter No. of Containers Submitted for Each Analysis

SAMPLE NUMBER/DESIGNATION ZZZZ-ZZ99-ZZ99	DATE 19__	TIME	COMP	GRAB	SAMPLE LOCATION/DESCRIPTION	TOTAL CONTAINERS	VOC	SVOC	PAH	PCB	TAL METALS	~~METALS (TAL)~~ OAK 9/12/02	GLYCOL				Comments	SEALS INTACT AT LAB (Y,N/INITIALS)
VWR-003-02-ESW	9/12/02	1240		X	LOCATION # 3 ON DRAWING	4	X	X	X	X	X							
VWR-003-02-ESW	9/12/02	1240		X	LOCATION # 3 ON DRAWING	1							X					
~~VWR-006-02-EBT~~ OAK 9/12/02	~~9/12/02~~	~~1297~~		X	~~LOCATION # 6 ON DRAWING~~	~~1~~		X	X	X	X							
VWR-007-04-ERB	9/12/02	1430		X	LOCATION # 7 ON DRAWING	2	X										RINSATE	
VWR-002-02-ERB	9/12/02	1500		X	LOCATION # 2 ON DRAWING	2	X										RINSATE	
					Total Containers													

Relinquished By (Print)	DATE	Received by (Print)	Relinquished By (Print)	DATE	Received by (Print)
GREG KNIGHT	9/12/02	DJ Gillespie			
(Sign) Gregory A Knight	TIME 15:40	(Sign) D Gillespie	(Sign)	TIME	(Sign)
Relinquished By (Print) DJ Gillespie	DATE 9/12/02	Received by (Print) L L Cockrum	Relinquished By (Print)	DATE	Received by (Print)
(Sign) D Gillespie	TIME ~~15:40~~ 21:00	(Sign) D L Cockrum	(Sign)	TIME	(Sign)

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Project # 17297	P.O.#
Project Name FT. DEARBORN USACE	Laboratory ARDL, INC.
Project Location CHICAGO, IL	Address P.O. BOX 1566 400 AVIATION DR MT. VERNON, IL
Project Manager JIM PACCI	Sampler(s) GREG KNIGHT

ANALYSES REQUESTED — Enter No. of Containers Submitted for Each Analysis

SAMPLE NUMBER/DESIGNATION ZZZZ-ZZ99-ZZ99	DATE 2002	TIME	COMP	GRAB	SAMPLE LOCATION/DESCRIPTION	TOTAL CONTAINERS	VOC	SVOC	PAH	PCB	TAL METALS	GLYCOL					Comments	SEALS INTACT AT LAB (Y,N/INITIALS)
VWR-002-02-ERB	9/12	1500		X	LOCATION #2 ON DRAWING	4		X	X	X								
FSS-004-04-ESW	9/13	0730		X	LOCATION #4 ON DRAWING	4	X	X	X	X	X							
FSS-003-04-ESW	9/13	0735		X	LOCATION #3 ON DRAWING	4	X	X	X	X	X							
FSS-002-04-ESW	9/13	0746		X	LOCATION #2 ON DRAWING	4	X	X	X	X	X							
FSS-001-04-ESW	9/13	0808		X	LOCATION #1 ON DRAWING	4	X	X	X	X	X							
FSS-008-04-ESW MS MSD	9/13	0808		X	LOCATION #1 ON DRAWING	7	X	X	X	X	X							
VWR-001-03-ESW	9/13	0934		X	LOCATION #1 ON DRAWING	5	X	X	X	X	X	X		→			Containers shown # as VWR-001-03-EBT. Changed # per Tom Rinebolt dlc 9-16-02	
					Total Containers													

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GREG KNIGHT	9/13/02	FED-X AZ# 926319381114			
(Sign) Gregory A Knight	TIME 1143	(Sign) NA	(Sign)	TIME	(Sign)
Relinquished By (Print)	DATE 9/14/02	Received by (Print) Rob Dismang	Relinquished By (Print)	DATE	Received by (Print)
(Sign)	TIME 0930	(Sign) [signature]	(Sign)	TIME	(Sign)

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Figure 3-2 Chair[illegible]f Custody Record

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Laboratory ARDL, INC

Project Name USACE FT DEARBORN

Address P.O. BOX 1566 400 Aviation Dr.

Project Location Chicago, IL

MT Vernon, IL

Project Manager Jim Facci

Sampler(s) Tom Rinebolt / Gary Bays

ANALYSES REQUESTED

SAMPLE NUMBER/DESIGNATION ZZZZ-ZZ99-ZZ99	DATE 2002	TIME	COMP	GRAB	SAMPLE LOCATION/DESCRIPTION	TOTAL CONTAINERS	VOC	SVOC	PAH 8270C SIM	PCB	TAL METALS	GLYCOL	TEMPERATURE				Comments	SEALS INTACT AT LAB (Y, MINITIALS)
OWS-005-08-MSD	9/17	1334		X	OWS-1 W BOTTOM	3	X										MSD	
OWS-005-08-EBT	9/17	1334		X	OWS-1-W. BOTTOM	5	X	X	X	X	X	X						
OWS-005-08-MS	9/17	1334		X	OWS-1-W. BOTTOM	3	X										MS	
OWS-006-08-EBT	9/17	1320		X	OWS-1-W-BOTTOM	5	X	X	X	X	X	X					Rapid TAT PAHs only	
OWS-005-08-MS/MSD	9/17	1334		X	OWS-1-W-BOTTOM	2		X	X	X	X	X	X				MS/MSD	
OWS-001-05-ESW	9/17	1505		X	OWS-1-E-SIDE WALL	5	X	X	X	X	X	X						
OWS-002-05-ESW	9/17	1520		X	OWS-1-S-SIDE WALL	5	X	X	X	X	X	X						
OWS-003-04-ESW	9/17	1545		X	OWS-1-W SIDE WALL	5	X	X	X	X	X	X						
OWS-004-05-ESW	9/17	1530		X	OWS-1-N SIDE WALL	5	X	X	X	X	X	X	X					
BLANK TEMPERATURE	9/17	1713		X	SAMPLE COOLER	1												
					Total Containers													

Relinquished By (Print)	DATE	Received by (Print)	Relinquished By (Print)	DATE	Received by (Print)
TOM RINEBOLT	9-17-02	FED 826319381103			
(Sign)	TIME 1737	(Sign) —	(Sign)	TIME	(Sign)
Relinquished By (Print)	DATE 9-18-02	Received by (Print) DL Cockrum	Relinquished By (Print)	DATE	Received by (Print)
(Sign)	TIME 1000	(Sign) DLCockrum	(Sign)	TIME	(Sign)

REMARKS OW-005-08-EBT - 1 Glycol CONTAINER BROKEN

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Project # 17297 | P.O.#

Project Name USACE Ft Dearborn

Project Location Chicago, Il

Project Manager Tim Kocl

Laboratory ARDL, INC

Address 400 Aviation Dr.

Mt Vernon, Il 62864

Sampler(s) Tom Rinebolt / David Whisenant

ANALYSES REQUESTED

Enter No. of Containers Submitted for Each Analysis

SAMPLE NUMBER/DESIGNATION ZZZZ-ZZ99-ZZ99	DATE 2002	TIME	COMP	GRAB	SAMPLE LOCATION/DESCRIPTION	TOTAL CONTAINERS	TCLP VOC	TCLP SVOC	TCLP PCB	pH	PAINT FILTER	FLASH POINT	HOLD (BOD, TSS, Carb, Chloride)	TCLP METALS			Comments	SEALS INTACT AT LAB (Y, N/INITIALS)
JTH3-RO-CC-001	9/18	0945	X		COMPOSITE ROLL OFFS 20-013, 20-009, 20-026	1	X	X	X	X	X	X		X			DISPOSAL	
JTH3-RO-SO-001	9/18	1058	X		COMPOSITE ROLL OFFS 20-008, 20-004, 20-003	1	X	X	X	X	X	X		X			DISPOSAL	
OWS1-RO-SO-001	9/18	1147	X		COMPOSITE ROLL OFFS R25230R, R25326RT	1	X	X	X	X	X	X		X			DISPOSAL	
OWS1-RO-CC-001	9/18	1220	X		COMPOSITE ROLL OFF R25353	1	X	X	X	X	X	X		X			DISPOSAL	
FSS-DR-SO-001	9/18	1333		X	GRAB SAMPLE FROM DRUM	1	X	X	X	X	X	X		X			DISPOSAL	
OWS1-BT-WT-001	9/18	1345		X	GRAB SAMPLE FROM BAKER TANK P4229	2							X				DISPOSAL	
					Total Containers													

Relinquished By (Print)	DATE	Received by (Print)	Relinquished By (Print)	DATE	Received by (Print)
Tom Rinebolt	9-18-02	FED X 826319381099			
(Sign) [signature]	TIME 1540	(Sign) —	(Sign)	TIME	(Sign)
Relinquished By (Print)	DATE 9-19-02	Received by (Print) D L Cockrum	Relinquished By (Print)	DATE	Received by (Print)
(Sign)	TIME 0945	(Sign) D L Cockrum	(Sign)	TIME	(Sign)

REMARKS added parameters for water sample and added TCLP METALS to Rock + soil samples per Tom Rinebolt - 9-19-02 dlc

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DATA VALIDATION REPORT, VARIOUS SITE REMEDIATIONS

FORT DEARBORN U.S. ARMY RESERVE CENTER CHICAGO, ILLINOIS

Prepared for

U.S. Army Corps of Engineers
Louisville, District

By

MWH

April 22, 2003

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1.0 INTRODUCTION

This Data Validation Report details the assessment and verification of analytical data collected and generated from the field activities for September 2002 soil investigation at the Fort Dearborn U.S. Army Reserve Center, Chicago, Illinois. Analytical procedures for this project are outlined in the project Quality Assurance Project Plan (QAPP) prepared by Ferguson Harbour Inc. (Ferguson-Harbour, 2002). Applied Research & Development Laboratory (ARDL) located in Mount Vernon, Illinois was subcontracted by Ferguson Harbour, Inc. to perform chemical analyses of the soil and water-matrix samples.

The samples were collected September 11, 12, 13, and 17, 2002. Approximately 27 soil samples and 6 water-matrix field quality control (QC) samples were collected as part of this investigation.

All analytical methods for this investigation were referenced from "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986. The samples were analyzed for one or more of the following parameters:

- Volatile organic compounds (VOCs) by SW8260B.
- Semi volatile organic compounds (SVOCs) by SW8270C
- Polynuclear aromatic compounds (PAHs) by modified SW8270C-selective ion monitoring (SIM)
- Polychlorinated biphenyls (PCBs) by SW8082
- Glycol by SW8015
- Metals by SW60101B/SW7470/SW7471A

Data validation of sample results was performed by MWH Americas, Inc. (MWH). Approximately 40 percent (12 soil and 1 water sample) of the total number of samples

collected underwent validation and systematic review, as specified in Section 9.2 of the project QAPP. The criteria checked included during this process included: chain-of-custody and cooler receipt forms, lab sample identification, contract sample identification (if different), sample results by sample and analytical fraction, analytical method performed, analytical reporting limits, lab data qualifiers, holding times, surrogate recoveries, lab control sample recoveries (LCS/LCSD), MS/MSD recoveries, laboratory duplicate results, method blank results, trip blank results, field blank results, instrument performance and calibration, correct qualitative and quantitative interpretation of raw data, and manually integrated peaks. Validation of the data submitted by ARDL was performed using the USEPA National Functional Guidelines for Organic (Inorganic) Data Review (USEPA, 1994a, 1994b) and QC acceptance criteria from SW-846 in accordance with the project QAPP. Data validation flags utilized in the validation process and the definitions of these qualifier flags are as follows:

- U — Indicates compound was analyzed for, but was not detected above the level of the associated value. The sample quantitation limit must be corrected for dilution and for percent moisture.
- J — The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ — Indicates compound was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
- R — Indicates that the data are unusable.

All qualifier flags have been incorporated in the data tables presented in this report. The results of this data validation are presented in the following sections.

In addition, MWH conducted a data review on the remaining portion of the data generated by ARDL, as specified in Section 9.2 of the project QAPP. The following items were reviewed as part of MWH's data review: chain-of-custody forms to verify that samples were collected for the parameters specified in the FSP, appropriate analyses

were requested from the laboratory, and that the laboratory received all samples; sample collection and analysis dates to verify that samples were analyzed within the specified holding times; chain-of-custody forms and summary of analytical data to verify that all required analyses were completed; laboratory case narratives to identify potential data quality problems; laboratory case narratives to identify manually integrated data; surrogate, LCS, MS.MSD recoveries; blank results; and calibration and tunes (insofar as that they were performed at the appropriate frequencies). The results of MWH's data review are incorporated into this report.

2.0 DATA VALIDATION RESULTS

This section provides a summary of the laboratory quality control (QC) sample results, which were used to meet the project data quality objectives (DQO) for the investigation. The following subsections summarize the validation and assessment findings in terms precision, accuracy, representativeness, comparability, and completeness (PARCC) criteria as defined in the project QAPP.

2.1 Gas Chromatograph/Mass Spectrometer (GC/MS) Tuning and Mass Calibration

Prior to analysis, GC/MS instrumentation is tuned to ensure optimization over the mass range of interest. To evaluate instrument tuning, the VOC, SVOC, and PAH methods require the analysis of specific tuning compounds. The resulting spectra must meet the criteria cited in the reference method and project QAPP before analysis is initiated. Analysis of the tuning compound must then be repeated every twelve hours throughout sample analysis to ensure the continued optimization of the instrument. Instrument tuning data were reviewed as part of the data validation. All tuning criteria met method and project QAPP requirements for the VOC, SVOC, and PAH analyses, indicating proper optimization of the instrumentation. Tuning compounds were analyzed at the required frequency.

2.2 Initial Calibration

To quantify compounds of interest in samples, calibration of the instrument over a specific concentration range must be performed. Initially, a calibration curve containing all compounds of interest is analyzed to characterize instrument response for each analyte over a specific concentration range. The average response factor (RF) and relative standard deviation (RSD) were calculated for each of the compounds analyzed. For the inductively coupled argon plasma (ICP) instrument, only one calibration standard and one blank sample were required for the initial calibration. For the initial calibration of

PCBs, only two specific PCB aroclors are required for calibration. Calibration of the remaining 4 aroclors is not required unless detected in a project sample.

The initial calibration data were compared against the criteria specified in the project QAPP for each of the methods. The initial calibration data reviewed included relative standard deviations (RSD), relative response factors (RRF), and correlation coefficients. The majority of the initial calibration data met the project QAPP requirements. Data associated with an analyte that did not meet calibration requirements were qualified following the project QAPP criteria. Table 1 lists the analytes that did not meet criteria for initial calibration, associated samples, and the applied flag.

2.3 Initial Calibration Verification (ICV)

To verify the accuracy of the initial calibration a standard from a second source or different vendor is analyzed. This standard as well as the initial calibration blank should be analyzed immediately after completing the ICV. The results from the reported ICVs were compared to the RRF and %D criteria listed in the project QAPP. Analytes in the ICVs that did not meet the criteria specified the project QAPP and the associated samples are listed in Table 1. The affected data were qualified following the project QAPP criteria.

2.4 Continuing Calibration

To ensure that instrument calibration is acceptable throughout the sample analysis period, continuing calibration standards must be analyzed and compared to the initial calibration curve every 12 hours. The continuing calibration verification (CCV) percent differences (%Ds) for several VOC and SVOCs were above the %D criteria specified in the project QAPP. Table 1 lists analytes, associated samples, and applied data flags for CCV data that did not meet project QAPP specified criteria for instrument sensitivity.

2.5 Holding Time Evaluation

To ensure results are representative of site conditions, each of the methods used to extract and analyze samples for this investigation has a prescribed time period in which the sample should be extracted and analyzed. The investigative samples were all extracted and analyzed within the holding time criteria listed in the project QAPP, with one exception. The VOC analysis for sample VWR-001-03-ESW was performed six days after sample collection. The VOC data for this sample were rejected following the criteria specified in the project QAPP. As stated above, all but one soil sample was analyzed for VOCs within the holding time of 48 hours of sample collection as specified by the project QAPP.

2.6 Internal Standard (IS) Recoveries

To correct for changes in GC/MS response and sensitivity, internal standard compounds are added to investigative samples and quality control samples prior to VOC, SVOC, and PAH analysis. All results are calculated as a ratio of the internal standard response. The criteria by which the internal standard results are assessed are as follows:

- Internal standard area counts must not vary by more than a factor of two (-50 percent to +150 percent) from the associated continuing calibration standard.

- The retention time of the internal standard must not vary more than ± 30 seconds from the associated continuing calibration standard.

The majority of the VOC, SVOC, and PAH sample results met this criteria. The sample results that did not meet these criteria are listed in Table 2, along with the internal standard percent recovery (%R) and the applied data flag for each of the affected analytes.

2.7 Surrogate Spike Recoveries

All samples, blanks, and standards analyzed for VOCs, SVOCs, PAHs, and PCBs were spiked with surrogate compounds prior to sample extraction and/or analysis. Surrogate recoveries are used to evaluate the effects of individual sample matrices on analytical efficiency and are evaluated using method control limits specified in the project QAPP. All of the investigative sample surrogate recoveries were within the acceptable limits specified in the project QAPP.

2.8 Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analyses

The LCS and LCSD are used to assess overall analytical performance. LCSs are prepared and analyzed with each analytical batch. The RPD between the LCS and LCSD is used to assess analytical precision. The LCS/LCSD recoveries and RPDs were compared to the limits specified in the project QAPP for spike samples. All but three of the LCS recoveries and one LCS/LCSD RPD were within acceptable limits. The out-of-limit LCS recoveries and RPD are listed in Table 3. It should be noted that because two of the three LCS recoveries were above the control limit and the associated investigative sample results for these two analytes were non-detect, none of the data associated with these two LCS samples required qualification. The data associated with the one low LCS recovery and elevated RPD were qualified following the project QAPP criteria.

2.9 Matrix Spike/Matrix Spike (MS/MSD) Analyses

The recoveries of MS/MSD analyses are used to assess analytical accuracy for the individual sample matrices. The RPD between the MS and MSD is used to assess matrix homogeneity and analytical precision. The quality control criteria for MS/MSD recoveries and RPDs for each of the analytical methods are listed in the project QAPP. The majority of the project sample MS/MSD recoveries and RPDs were within

acceptable limits. MS/MSD recoveries and/or RPDs that were outside of acceptable criteria are listed in Table 4 as well as the applied data flag.

2.10 Method Blank Analyses

Method blank samples are prepared from a clean control sample matrix, they are prepared and analyzed with the investigative samples to monitor for potential sample contamination introduced during laboratory processing. Method blanks were performed and reported with each analytical batch.

The method blank results were free of target analyte detections with the exception of methylene chloride, which has been defined by the USEPA as a common laboratory contaminant. Sample methylene chloride results associated with the contaminated method blank data were qualified following the criteria in the project QAPP and are listed in Table 5. Several sample detections of analytes recognized by the USEPA as common laboratory contaminants, including methylene chloride, acetone, and phthalates, have been listed in Table 5. The method blank results associated with these samples did not contain detections of these analytes.

2.11 Trip Blank Analyses

Trip blank samples are transported, stored, and analyzed with investigative samples to identify potential cross-contamination of VOC samples. Trip blank sample 9-12-02-TB was transported and submitted for analysis with the investigative samples collected on September 12, 2002. The common laboratory contaminant, methylene chloride, was reported in the trip blank data. Methylene chloride sample detections associated with the trip blank were qualified following the project QAPP criteria and are listed in Table 5.

2.12 Equipment Rinsate Blank Analyses

Equipment rinsate blank samples are prepared by pouring a clean, control water sample through decontaminated sample collection equipment. Rinsate blanks are used to monitor the efficiency of the equipment decontamination procedure. Five rinsate blank samples were collected and submitted for analysis for this investigation. One of the rinsate blanks was submitted for the full suite of analyses. Two of the four other rinsate blanks were submitted for VOC analysis only, for metals analysis, and one for SVOCs, PAHs, and PCBs analyses.

Target analytes were reported in two of the rinsate blank results. The common laboratory contaminants methylene chloride and acetone were reported in rinsate blank FIP-003-06-ERB. The common drinking water contaminant chloroform was reported in this sample as well as the target analyte toluene. Chloroform and toluene were not detected in any of the associated samples. Methylene chloride and acetone results in associated samples were qualified following the project QAPP criteria and are listed in Table 5.

Low concentrations of metals were reported in rinsate blanks FIP-003-06-ERB and VWR-002-02-ERB. The concentrations of metals reported in samples associated with these two rinsate samples were more than 5-times the rinsate concentration. Therefore, no qualification to the associated data was required.

2.13 Manual Integration

Manual integration is performed to correct errors in automated integration performed by the data acquisition software. Integration errors can include overlap between GC peaks and baseline issues. The case narrative did not provide any documentation of manual integration for any of the GC or GC/MS analysis. The raw data for two of the SDGs were reviewed, evidence of manual integration was observed in the SVOC and PCB raw

data. Copies of the unaltered and altered chromatograms were included in these two SDGs. The data associated with the observed manual integrations was non-detect.

2.14 Completeness

Analytical completeness is used to monitor and assess the amount of data required to meet project DQOs and the data usability. Taking the number of valid, usable data points, and dividing them by the total number of data points for each method yields the calculated completeness. Based on the results of the data validation described in the above paragraphs, all soil data are considered valid as qualified, with one exception. The VOC data for sample VWR-001-03-ESW were rejected due to an exceeded holding time. Therefore the completeness for VOCs is 96 percent, which meets the project completeness goal of 90 percent. The completeness for the other methods performed for this investigation was 100 percent.

3.0 SUMMARY

This data validation report verified and validated the site characterization analytical data reported by the fixed laboratory, ARDL of Mt. Vernon, Illinois. The data validation was completed based on the criteria presented in the Quality Assurance Project Plan (Ferguson-Harbour, 2002).

MWH performed data validation and systematic review for approximately forty percent of the total number of samples collected and a data review for the remaining portions of the data, as specified in Section 9.2 of the project QAPP. In addition to the data validation performed by MWH, a minimum of 10 percent of the data was fully validated by an independent USACE contractor, Lee A. Knupple and Associates, Inc. of Montgomery, Ohio. Copies of the independent data validation report are being submitted separately. Principal findings and conclusions of MWH's data validation process are highlighted below:

- Based on the results of equipment tuning, initial calibration, initial calibration verification, and continuing calibration the data are considered precise as qualified.

- Based on the results of the holding time evaluation, the data for this project were considered accurate as qualified, except for those data that were qualified with an "R" flag. All extraction and holding times were met except for soil VOC sample VWR-001-03-ESW.

- Based on the results for internal standard recoveries, surrogate spike recoveries, laboratory control sample/laboratory control sample duplicate analyses, and matrix spike/matrix spike duplicate analyses the results are precise as qualified.

- Trace concentrations of methylene chloride were detected in the method and trip blanks. Methylene chloride is recognized by the USEPA as common laboratory contaminant. Methylene chloride is attributed to laboratory contamination and is not representative of site conditions.

- Trace concentrations of methylene chloride, acetone, chloroform and toluene were detected in the equipment rinseate blanks. Methylene chloride and acetone are attributed to laboratory contamination and are not representative of site conditions. Chloroform and toluene were not detected in any of the associated samples.

- The case narratives provided a summary of manual integration. This documentation is required by the *Final Version 2.0 of GC/MS Manual Integration Policy for Region 5 Federal Facilities Response Section* (USEPA, 2001). Before and after chromatograms were provided by the laboratory. The raw data was reviewed for evidence of manual integration and were validated.

- All investigative and QC samples were collected as scheduled. Sample completeness is 100 percent.

- The analytical completeness was 100 percent for all analyses except soil VOCs. The soil VOCs had a completeness of 96 percent, which was greater than the completeness goal of 90 percent.

Overall, the data collected were of sufficient quality and quantity for intended data end use.

4.0 REFERENCES

Ferguson-Harbour, Inc. 2002. *Final Quality Assurance Project Plan, Ft. Dearborn USARC, Chicago, IL, Various Site Remediations*. Prepared for the U.S. Army Corps of Engineers. Contract No. DACA27-97-D-0007, Delivery Order No. 0016. August.

U.S. Environmental Protection Agency. 1994a. USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review. February.

U.S. Environmental Protection Agency. 1994b. USEPA Contract Laboratory Program, National Functional Guidelines for Organic Data Review, February.

TABLE 1

SUMMARY OF DATA QUALIFIED
BASED ON INITIAL AND CONTINUING CALIBRATION RESULTS
SEPTEMBER 2002 FIELD EFFORT

FORT DEARBORN USARC
CHICAGO, ILLINOIS
(Page 1 of 2)

Date	Fraction	Standard	Target Compound	%RSD or %D	Acceptance Criteria %	Associated Samples	Result	Qualifier
9/26/02	SVOC	IC	Dimethyl phthalate	41	30	FSS-004-04-ESW	ND/ND	UJ/UJ
						FSS-003-04-ESW	ND/ND	UJ/UJ
						FSS-002-04-ESW	ND/ND	UJ/UJ
						FSS-001-04-ESW	ND/ND	UJ/UJ
						FSS-008-04-ESW	ND/ND	UJ/UJ
						FSS-001-03-ESW	ND/ND	UJ/UJ
						FIP-003-06ERB	ND/ND	UJ/UJ
9/30/02	SVOC	ICV	Hexachlorocyclopentadiene	26.6	25	VWR-002-02-ERB	All ND	All UJ
			2,4-Dinitrophenol	35.6	25			
			Pentachlorophenol	39.1	25			
10/7/02	SVOC	CCV	2,4-Dinitrophenol	34	25	FSS-003-04-ESW	All ND	All UJ
			Pentachlorophenol	47	25	FSS-002-04-ESW	All ND	All UJ
			3,3'-Dichlorobenzidine	32	25	FSS-001-04-ESW	All ND	All UJ
						FSS-008-04-ESW	All ND	All UJ
						FSS-001-03-ESW	All ND	All UJ
						OWS-005-08-EBT	All ND	All UJ
						OWS-006-08-EBT	All ND	All UJ
9/9/02	VOC	IC	trans-1,2-Dichloroethene	39.5	30	OWS-005-08-EBT	ND	UJ
						OWS-006-08-EBT	ND	UJ
						OWS-001-05-ESW	ND	UJ
						OWS-002-05-ESW	ND	UJ
						OWS-003-04-ESW	ND	UJ
						OWS-004-05-ESW	ND	UJ
9/10/02	VOC	ICV	trans-1,2-Dichloroethene	23.9	25	OWS-005-08-EBT	ND/ND	UJ/UJ
9/18/02	VOC	CCV	trans-1,2-Dichloroethene	22.6	25	OWS-006-08-EBT	ND/ND	UJ/UJ
						OWS-001-05-ESW	ND/ND	UJ/UJ
						OWS-002-05-ESW	ND/ND	UJ/UJ
						OWS-003-04-ESW	ND/ND	UJ/UJ
						OWS-004-05-ESW	ND/ND	UJ/UJ
9/25/02	SVOC	IC	Dimethyl phthalate	41	30	OWS-006-08-EBT	ND/ND	UJ/UJ
10/9/02	SVOC	IC	2,4-Dinitrophenol	55	30	OWS-002-05-ESW	ND/ND	UJ/UJ
			4-Nitrophenol	33	30	OWS-003-04-ESW	ND/ND	UJ/UJ
9/10/02	VOC	IC	trans-1,2-Dichloroethene	39	30	FIP-001-06-SSS	ND	UJ
						FIP-004-06-SSS	ND	UJ
						FIP-002-06-SSS	ND	UJ
						FIP-003-06-SSS	ND	UJ
						VWR-005-02-EBT	ND	UJ
						VWR-008-02-EBT	ND	UJ
						VWR-003-02-EBT	ND	UJ
						VWR-006-02-EBT	ND	UJ
						VWR-004-02-ESW	ND	UJ
						FSS-005-08-EBT	ND	UJ
						FSS-006-05-EBT	ND	UJ
						FSS-007-05-EBT	ND	UJ
						VWR-002-02-ESW	ND	UJ
						VWR-007-04-EBT	ND	UJ
						VWR-001-03-EBT	ND	UJ
9/19/02	SVOC	IC	2,4-Dinitrophenol	42	30	FIP-004-06-SSS	ND/ND	UJ/UJ
						FIP-002-06-SSS	ND/ND	UJ/UJ
						FIP-003-06-SSS	ND/ND	UJ/UJ
						VWR-005-02-EBT	ND/ND	UJ/UJ
						VWR-006-02-EBT	ND/ND	UJ/UJ

TABLE 1

SUMMARY OF DATA QUALIFIED
BASED ON INITIAL AND CONTINUING CALIBRATION RESULTS
SEPTEMBER 2002 FIELD EFFORT

FORT DEARBORN USARC
CHICAGO, ILLINOIS

Date	Fraction	Standard	Target Compound	%RSD or %D	Acceptance Criteria %	Associated Samples	Result	Qualifier
9/20/02	SVOC	CCV	n-Nitrosodimethylamine	31	25	FIP-001-06-SSS	All ND	All UJ
			bis(2-chloroisopropyl) Ether	41	25	FIP-004-06-SSS	All ND	All UJ
			Nitrobenzene	31	25	FIP-002-06-SSS	All ND	All UJ
			4-Chloroaniline	28	25			
			2,4-Dinitrophenol	38	25			
			4-Nitrophenol	52	25			
			Hexachlorobenzene	26	25			
			3,3'-Dichlorobenzidine	27	25			
10/3/02	SVOC	CCV	n-Nitroodimethylamine	31	25	VWR-005-02-EBT	All ND	All UJ
			bis (2-chloroisopropyl) Ether	41	25	VWR-006-02-EBT	All ND	All UJ
			4-Chloroaniline	28	25			
			2,4-Dinitrophenol	38	25			
			4-Nitrophenol	52	25			
			Hexachlorobenzene	27	25			
			3,3'-Dichlorobenzidine	27	25			
9/30/02	SVOC	CCV	Hexachlorocyclopentadiene	37	25	FIP-003-06ERB	All ND	All UJ
			2,4-Dinitrophenol	36	25			
			Pentachlorophenol	39	25			
9/6/02	VOC	ICV	trans-1,3-Dichloropropene	26	25	9-12-02-TB	ND	UJ
						VWR-007-04-ERB	ND	UJ
						VWR-002-02-ERB	ND	UJ
9/25/02	VOC	CCV	Bromoform	31	25	9-12-02-TB	All ND	All UJ
10/9/02	SVOC	IC	2,4-Dichlorophenol	33	30	VWR-003-02-ESW	ND/ND	UJ/UJ
						VWR-004-02-ESW	ND/ND	UJ/UJ
						FSS-005-08-EBT	ND/ND	UJ/UJ
						FSS-006-05-EBT	ND/ND	UJ/UJ
						FSS-007-05-EBT	ND/ND	UJ/UJ
						VWR-002-02-ESW	ND/ND	UJ/UJ
						VWR-007-04-EBT	ND/ND	UJ/UJ
						VWR-001-03-EBT	ND/ND	UJ/UJ

%D - Percent difference
%RSD - Percent relative standard deviation
CCV - Continuing calibration verification
IC - Initial Calibration
ICV - Initial calibration verfication
J - Reported result is an estimate.
ND - Non-detect
SVOCs - Semivolatile organic compounds
UJ - Reporting limit is an estimated limit
VOC - Volatile organic compounds

TABLE 2

SUMMARY OF DATA QUALIFIED BASED ON INTERNAL STANDARD RESULTS
SEPTEMBER 2002 FIELD EFFORT

FORT DEARBORN USARC
CHICAGO, ILLINOIS
(Page 1 of 1)

Sample ID	Method	Internal Standard	%R	Parameter	Qualifier
FIP-002-06-SSS	8270	Perylene-$_{d12}$	42.9	Di-n-octylphthalate	UJ
FIP-002-06-SSSRE	8270	Perylene-$_{d12}$	47.8	Di-n-octylphthalate	UJ
VWR-005-02-EBT	8270 SIM	Perylene-$_{d12}$	48.5	Benzo (b) fluoroanthene	J
				Benzo (k) fluoroanthene	J
				Benzo (a) pyrene	J
				Indeno (1,2,3-cd) pyrene	J
				Dibenzo (a,h) anthracene	UJ
				Benzo (g,h,i) perylene	J

Only analytes quantitated with the internal standard were qualified and are listed in this table.

%R - Percent recovery
UJ - Reported detection limit is estimated
SIM - Selective ion monitoring
J - Reported concentration is estimated

TABLE 3

SUMMARY OF DATA QUALIFIED BASED ON LCS/LCD RECOVERIES SEPTEMBER 2002 FIELD EFFORT

FORT DEARBORN USARC
CHICAGO, ILLINOIS

Sample ID	Parameter	Result		LCS (%R)	LCSD (%R)	Limit (%)	RPD	RPD Limit (%)	Qualifier
9/18/02 LCS/LCSD	1,4-Dichlorobenzene	ND	µg/kg	**28**	57		**32**	25	UJ
9/25/02 LCS	Pentachlorophenol	ND	µg/kg	121	NA	34 - 117			none
9/16/02 LCD	4-Nitrophenol	ND	µg/kg	120	NA	41 - 112			none

Bold text indicates a result outside of acceptable limits.

%R - Percent recovery
NA - Not analyzed
ND - Non-detect
LCS - Laboratory control sample
LCSD - Laboratory control sample duplicate
µg/kg - Micrograms per kilogram
UJ - Reported detection limit is estimated

TABLE 4

SUMMARY OF DATA QUALIFIED BASED ON MS RECOVERIES FOR SEPTEMBER 2002 FIELD EFFORT

FORT DEARBORN USARC
CHICAGO, ILLINOIS
(Page 1 of 1)

Sample ID	Parameter	Result		MS (%R)	MSD (%R)	Limit (%)	RPD	RPD Limit (%)	Qualifier
FSS-008-04-ESW	1,4-Dichlorobenzene	ND	µg/kg	**26**	**25**	36 - 89	2	33	UJ
	Pentachlorophenol	ND	µg/kg	**121**	102	34 - 117	17	25	none
	Naphthalene	ND	µg/kg	64	49	21 - 133	**26.4**	25	UJ
	Fluorene	ND	µg/kg	83	63	59 - 121	**26.3**	25	UJ
	Phenanthrene	ND	µg/kg	82	59	54 - 120	**32.5**	25	UJ
	Anthracene	ND	µg/kg	81	58	27 - 133	**33.7**	25	UJ
	Fluoranthene	ND	µg/kg	82	59	26 - 137	**32.7**	25	UJ
	Pyrene	ND	µg/kg	91	65	52 - 115	**33.5**	25	UJ
	Benzo(a)anthracene	ND	µg/kg	83	58	33 - 143	**35.1**	25	UJ
	Chrysene	ND	µg/kg	91	63	17 - 168	**36.4**	25	UJ
	Benzo(b)fluoranthene	ND	µg/kg	78	60	24 - 159	**33.5**	25	UJ
	Benzo(k)fluoanthene	ND	µg/kg	88	61	11 - 162	**36**	25	UJ
	Benzo(a)pyrene	ND	µg/kg	83	59	17 - 163	**33.3**	25	UJ
	Indeno(1,2,3-cd)pyrene	ND	µg/kg	95	64	1 - 171	**38**	25	UJ
	Dibenzo(a,h)anthracene	ND	µg/kg	101	68	1 - 227	**39.2**	25	UJ
	Benzo(g,h,i)perylene	ND	µg/kg	88	61	1 - 219	**36.3**	25	UJ
	Zinc	56.7	mg/kg	**83**	**72**	75 - 125	7	20	J
OWS-005-08-EBT	Antimony	0.92	mg/kg	**35**	**29**	75 - 125	17	20	J
	Cobalt	15	mg/kg	**63**	**68**	75 - 125	5	20	J
	Nickel	26.6	mg/kg	**68**	**71**	75 - 125	3	20	J
FIP-001-06-SSS	1,4-Dichlorobenzene	ND	µg/kg	**38**	**30**	36 - 89	23	33	UJ
	4-Nitrophenol	ND	µg/kg	**141**	**131**	41 - 112	7	25	none
	Antimony	1	mg/kg	**27**	**25**	75 - 125	6	20	J
	Copper	56.3	mg/kg	82	**57**	75 - 125	10	20	J
	Nickel	39	mg/kg	78	**74**	75 - 125	3	20	J
VWR-005-02-EBT	1,4-Dichlorobenzene	ND	µg/kg	**32**	**23**	36 - 89	**35**	33	UJ
	4-Nitrophenol	ND	µg/kg	**123**	**114**	41 - 112	7	29	none
	Antimony	0.87	mg/kg	**27**	**26**	75 - 125	4	20	J
	Copper	38.1	mg/kg	**156**	79	75 - 125	31	20	J
VWR-002-02-ESW	Antimony	2.4	mg/kg	**27**	**28**	75 - 125	5	20	J
	Lead	158	mg/kg	68	115	75 - 125	13	20	J

[a] - Sample result is more than 4 times the spike concentration, no qualification to the data is required.
Bold text indicates a result outside of acceptable limits.

%R - Percent recovery
µg/kg - Micorgrams per kilogram
J - Reported concentration is estimated
mg/kg - Milligrams per kilogram
MS - Matrix spike
MSD - Matrix spike duplicate
ND - Non-detect
RPD - Relative percent difference
UJ - Reported detection limit is estimated

TABLE 5

SUMMARY OF DATA QUALIFIED BASED ON BLANK DATA
SEPTEMBER 2002 FIELD EFFORT

FORT DEARBORN USARC
CHICAGO, ILLINOIS
(Page 1 of 2)

Blank	Associated Samples	Parameter	Result	Units	Qualifier
0924JFSP (MB)		Methylene chloride	6.01	µg/kg	---
	FSS-004-04-ESW	Methylene chloride	5.5 JB	µg/kg	U
	FSS-003-04-ESW	Methylene chloride	4.7 JB	µg/kg	U
	FSS-002-04-ESW	Methylene chloride	6.2 JB	µg/kg	U
	FSS-001-04-ESW	Methylene chloride	7.6 JB	µg/kg	U
	FSS-008-04-ESW	Methylene chloride	6.2 JB	µg/kg	U
0924JFSQ (MB)		Methylene chloride	3.8 J	µg/kg	---
	OWS-006-08-EBT	Methylene chloride	4.8 J	µg/kg	U
	OWS-001-05-EBW	Methylene chloride	5.3 J	µg/kg	U
	OWS-003-04-ESW	Methylene chloride	5.6 J	µg/kg	U
	OWS-004-05-ESW	Methylene chloride	8.2 J	µg/kg	U
Y2541 MB	None	No target analytes reported			---
J6514 MB	None	No target analytes reported			---
FIP-003-06-ERB		Methylene chloride	6.5	µg/kg	---
		Chloroform	3.2 J	µg/kg	---
		Toluene	4.1 J	µg/kg	---
		Acetone	44.2	µg/kg	---
	FIP-001-06-SSS	Methylene chloride	8.0	µg/kg	U
	FIP-004-06-SSS	Methylene chloride	7.1	µg/kg	U
	FIP-002-06-SSS	Methylene chloride	6.7	µg/kg	U
	FIP-002-06-SSS	Acetone	71.9	µg/kg	U
Z3972 MB		No target analytes reported			---
	FIP-002-06-SSS	Butylbenzylphthalate	952	µg/kg	---
	FIP-002-06-SSS	bis(2-Ethylhhexyl) phthalate	124 J	µg/kg	---
	FIP-003-06-SSS	Butylbenzylphthalate	77.3 J	µg/kg	---
FIP-003-06-ERB	None	Calcium	0.33	mg/l	---
		Iron	0.13	mg/l	---
		Magnesium	0.11	mg/l	---
		Manganese	0.017	mg/l	---
		Zinc	0.0082	mg/l	---
Y2553 MB	None	No target analytes reported			---
Y2572 MB	None	No target analytes reported			---
9-12-02-TB		Methylene chloride	7.8	µg/l	---
	VWR-005-02-EBT	Methylene chloride	6.9	µg/kg	U
	VWR-006-02-EBT	Methylene chloride	7.9	µg/kg	U
	VWR-006-02-EBT	Acetone	57.4 J	µg/kg	---
	VWR-008-02-EBT	Methylene chloride	7.4	µg/kg	U
	VWR-003-02-ESW	Methylene chloride	6.8	µg/kg	U
Z3972 (MB)		No target analytes reported			---
	VWR-005-02-EBT	bis(2-Ethylhhexyl) phthalate	155 J	µg/kg	---
	VWR-006-02-EBT	bis(2-Ethylhhexyl) phthalate	775	µg/kg	---
	VWR-008-02-EBT	bis(2-Ethylhhexyl) phthalate	621	µg/kg	---
	VWR-003-02-ESW	bis(2-Ethylhhexyl) phthalate	69.1	µg/kg	---

TABLE 5

SUMMARY OF DATA QUALIFIED BASED ON BLANK DATA
SEPTEMBER 2002 FIELD EFFORT

FORT DEARBORN USARC
CHICAGO, ILLINOIS
(Page 2 of 2)

Blank	Associated Samples	Parameter	Result	Units	Qualifier
Z7393 (MB)		No target analytes reported			---
	FSS-005-08-EBT	Butylbenzylphthalate	1310	µg/kg	---
	FSS-006-05-EBT	Butylbenzylphthalate	123 J	µg/kg	---
	FSS-007-05-EBT	Di-n-butylphthalate	64.3 J	µg/kg	---
	FSS-007-05-EBT	Butylbenzylphthalate	274 J	µg/kg	---
	VWR-002-02-ESW	Butylbenzylphthalate	92.8 J	µg/kg	---
	VWR-001-03-EBT	Butylbenzylphthalate	410 J	µg/kg	---
VWR-002-02-ERB	None	Cadmium	0.15	mg/l	---
		Zinc	0.0065	mg/l	---

µg/kg = Micrograms per kilogram
µg/l = Mircograms per liter
ERB = Equipment rinsate blank
MB = Method blank
mg/l = Milligrams per liter
TB = Trip blank
--- = Not Applicable or None
U = Result should be considered non-detect at the reported concentration.